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ABSTRACT

This training package of evaluative indices for process curriculum materials and educational programs is composed of ten handouts: (1) a set of materials designed for use by teachers, curriculum coordinators, school administrators, college professors, or educational consultants, intended to teach basic concepts about process education and demonstrate how the basic objectives of any curriculum innovation may be translated into a set of indices useful for operationalizing and evaluating the program; (2) a discussion of (a) assumptions, justifications, and definitions for process education, (b) opposed value positions underlying process and conventional educational practice, (c) the relationship between basic value positions and operational classroom role descriptions, and (d) translating role descriptions into appropriate and inappropriate behavioral indices for teachers and pupils; (3) presentation of pupil and teacher role indices, each related to one or more of the basic value positions for process education and the derivative role expectations used to assess the degree to which the teacher and pupils in a given classroom are exhibiting behavior consistent with the goals of process education; (4) an experience in creating evaluative indices; (5) presentation of a curriculum in social interaction, self-perception skills, and creative thinking and feeling skills; (6) an actual problem concerning an introductory teacher education program presented as a case study with questions and a set of solutions; (7) another case study problem; (8) a case study in goals, rationales, and procedures; (9) a case study in operationalizing plans and objectives intended as a further illustration of how the general principles outlined in the first portion of the training package can be applied to teacher education program development; and (10) concluding remarks. (MM)

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TEACHER EDUCATION FORUM

The *Forum Series* is basically a collection of papers dealing with all phases of teacher education including inservice training and graduate study. It is intended to be a catalyst for idea exchange and interaction among those interested in all areas of teacher education. The reading audience includes teachers, school administrators, governmental and community administrators of educational agencies, graduate students and professors. The *Forum Series* represents a wide variety of content: position papers, research or evaluation reports, compendia, state-of-the-art analyses, reactions/critiques of published materials, case studies, bibliographies, conference or convention presentations, guidelines, innovative course/program descriptions, and scenarios are welcome. Manuscripts usually average ten to thirty double-spaced typewritten pages; two copies are required. Bibliographical procedures may follow any accepted style; however, all footnotes should be prepared in a consistent fashion. Manuscripts should be submitted to William E. Blanton, editor. Editorial decisions are made as soon as possible; accepted papers usually appear in print within two to four months.

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Evaluative Indices For Curriculum Materials And Educational Programs

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HANDOUT 1

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EVALUATIVE INDICES

In this activity you will learn how to translate the basic values and objectives of a curriculum innovation into general classroom role descriptions or expectations for pupils and teachers. These role descriptions can be further translated into observable classroom indices. The indices in turn can be used to evaluate whether or not program goals are being achieved and where changes are needed. The indices can be used in an observational system or can also be used to construct attitude scales, questionnaires and tests which can be administered to individuals participating in the program.

The sample problems presented here are based upon process curricula programs. Process curricula place great emphasis upon skills basic to creative behavior and problem solving. Consequently many of the sample indices presented may have direct relevance to assessing the intended outcomes of programs concerned with promoting creative behavior. However, even if this were not the case, this set of materials should provide useful information about how to construct appropriate evaluative indices for any type of program which has clearly stated outcomes, or instructional materials and procedures from which its intended outcomes can be inferred. In addition, the materials should provide information about the assumptions, justifications and goals of process education. Individuals interested in promoting creative behavior through instruction should find this to be useful information.*

Intended Audience

This set of materials is designed for use by teachers, curriculum coordinators, school administrators, college professors or educational program consultants. It is intended to teach basic concepts about process education. However, its primary goal is to demonstrate how the basic objectives of any curriculum innovation may be translated into a set of indices useful for operationalizing and evaluating the program.

Objectives

Following use of these materials the individual should be able to:

1. Recognize, recall and state:

   a) the major assumptions of process education
   b) the major logical justifications for process education
   c) the differences in basic value positions of conventional and process education with respect to the nature of knowledge, learning, the learner, and the purpose of schooling

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d) the relationship between the basic value positions of process education and operational classroom roles for teachers and pupils.

2. Generate and list objective descriptions of classroom roles for pupils and teachers congruent with the basic values for process education.

3. Translate objective descriptions of pupil and teacher classroom roles for process education into:

   a) behavioral indicators to assess the degree to which exhibited teacher and pupil classroom roles are congruent with the practice of process education
   b) criteria and objectives by which to

      1) modify and improve existing lesson plans, instructional procedures, classroom activities toward the practice of process education

      2) select and design new instructional arrangements and materials toward the practice of process education.

4. Apply derived indicators, criteria, and objectives to the analysis and/or design of teacher and pupil classroom learning roles and instructional materials toward operationalizing the values of process education.

5. Generalize the techniques in items 2, 3, and 4 above to similar applications for any set of curriculum materials or objectives, process education oriented or otherwise.

Procedure

The simulation activity used to achieve the above objectives consists of three parts.

First, an example will be presented which shows how such indices can be generated.

Second, a simulation will be conducted in which some indices related to the example problem will be applied.

Third, a new problem will be presented and participants will be asked to briefly describe pupil and teacher role expectations and generate appropriate observational indices.

At the conclusion of the activity, the workshop leader will briefly discuss other ways and methods to determine the degree to which an innovation has been successfully implemented.

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HANDOUT 2

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*Other publications describe the relationship between process curricula and creativity development in much more depth. (Cole, 1969, 1972)

EXAMPLE PROBLEM 1

ASSUMPTIONS, JUSTIFICATIONS, AND DEFINITIONS FOR PROCESS EDUCATION

The primary assumptions, justifications, and definitions for process education are summarized below. These have been abstracted from a more complete statement you may wish to refer to.*

Assumptions for Process Education

- *Knowledge is an organized but tentative and arbitrary collection of changing and expanding information which each individual adapts and uses to make meaning from his unique experience.*
- *Learning (meaning making) is a natural and creative activity by which each person organizes and makes meaning (knowledge) from his experience toward fulfillment of his needs.*
- *Needs are the basis of the affective commitment which makes possible both the task of meaning making (learning, building knowledge) and the retention of the meaning made (knowledge).*
- *The process by which individuals make meaning (learn, build knowledge) from their experience is equally as important and more stable and lasting than either the experience or the meaning made (knowledge).*
- *Skills are the basis for the process of meaning making and all adaptive, productive, and satisfying behavior.*
- *Freedom to creatively apply skills to the process of organizing and making meaning (learning, building knowledge) from experience results in seeking, finding, and solving problems.*
- *Schools can provide the setting for individuals to develop and use those skills needed to freely build and make use of knowledge.*

Justifications For Process Education

- Chronic change makes it impossible to predict what knowledge and information will be needed in only a few years.
- Knowledge is vast. The amount which can be learned is limited.
- Process skills are more permanent than other types of learning.
- Information is stored and can be obtained when needed. Process skills cannot be "looked up."
- Emphasis on process skills prevents academic compartmentalization.
- Process skills are more widely applicable than knowledge.

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*Cole, Henry P. Process Education: The New Direction For Elementary-Secondary Schools. Englewood Cliffs, New Jersey: Educational Technology Publications, 1972.

-Process skills enable formal education to occur.

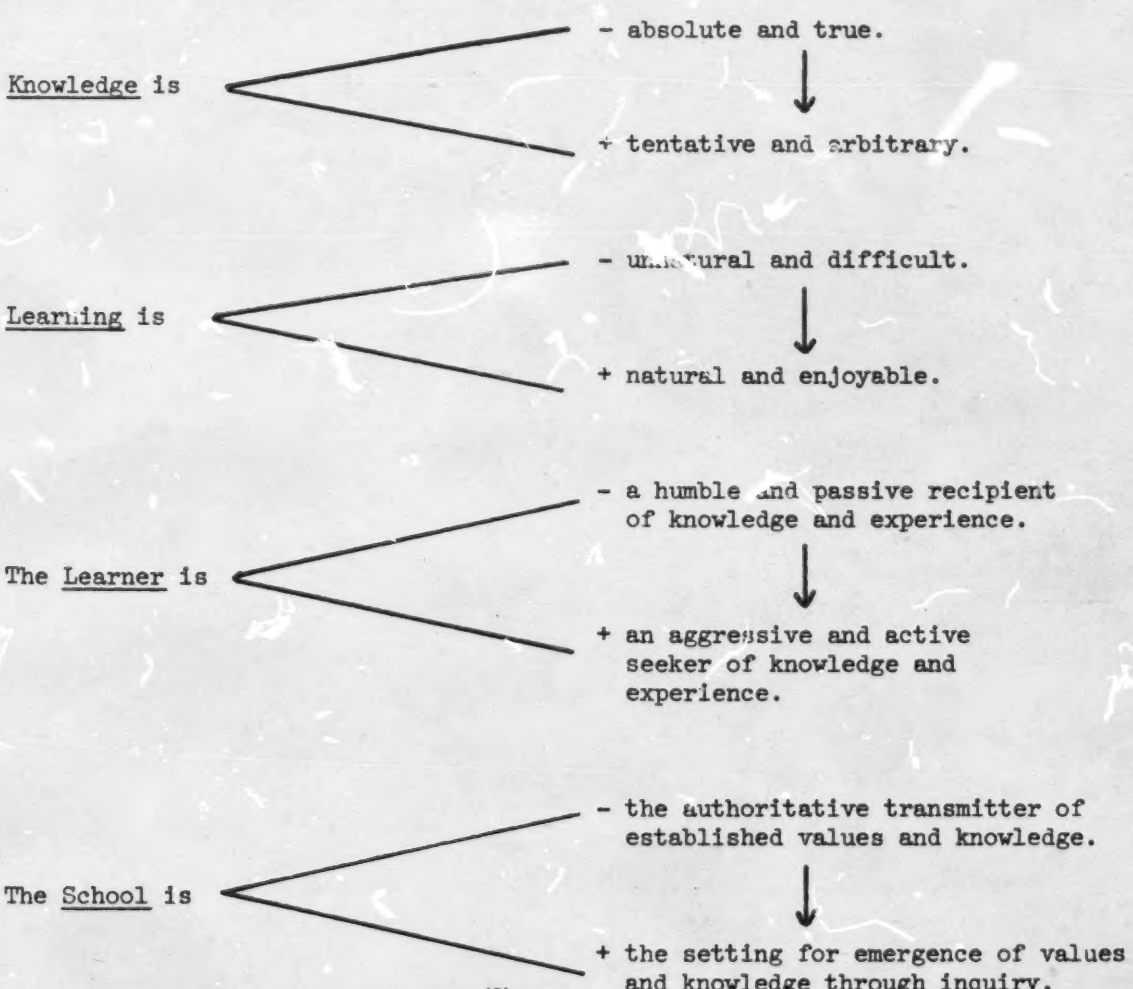
-Healthy and productive societies are formed from individuals who cope effectively using process skills.

-Process skills always have been and remain basic to coping with problems; thus their enhancement is essential to survival.

The basic assumptions for process education can be translated into some simpler set of basic value conflicts between it and more conventional educational practices as represented below in Table 1.

TABLE 1

OPPOSED VALUE POSITIONS UNDERLYING PROCESS AND CONVENTIONAL EDUCATIONAL PRACTICE


Knowledge is
- absolute and true.
+ tentative and arbitrary.
Learning is
- unnatural and difficult.
+ natural and enjoyable.
The Learner is
- a humble and passive recipient of knowledge and experience.
+ an aggressive and active seeker of knowledge and experience.
The School is
- the authoritative transmitter of established values and knowledge.
+ the setting for emergence of values and knowledge through inquiry.

RELATIONSHIP BETWEEN BASIC VALUE POSITIONS AND OPERATIONAL CLASSROOM ROLES

Values may be defined as either the ideals that people hold or the customs they practice. What people actually do (their customs) are often better indicators of their values than what they say are their ideals.

The values of a culture tend to define the roles expected of individuals in institutions in that culture. In education there are at least two different sets of values concerning the nature of knowledge, the learner, learning, and the purpose of schooling. Process educators and traditional educators have different sets of ideals in these four areas. Not only are their values in conflict, but each set of values gives rise to quite different role expectations for pupils and teachers. It is this property which makes the basic value positions represented in Table 1 useful. One can derive classroom roles for teachers and pupils appropriate or inappropriate to the practice of process education. Armed with descriptions of roles supportive of and opposed to process education, it is possible to: 1) analyze classroom learning activities, instructional procedures toward determining how well they are suited to achieving the ideals of process education, 2) modify existing materials, procedures, and activities to better achieve the ideals of process education, 3) design new instructional procedures and materials to achieve the goals of process education.

Such a procedure works for any curriculum innovation that has a specified and clear set of values and methodological preference. That is, the procedure is not restricted to the class of process education innovations.

TRANSLATING BASIC VALUE POSITIONS INTO APPROPRIATE AND INAPPROPRIATE ROLE DESCRIPTIONS

The materials in Table 2 below are general role descriptions for teachers and pupils which are highly appropriate and highly inappropriate to process education innovations. Given any clear statement of the value preference of any set of curriculum materials or teaching methodology, it is possible to construct similar tables.

TABLE 2

REPRESENTATIVE CLASSROOM ROLES APPROPRIATE AND INAPPROPRIATE TO PROCESS EDUCATION

Values About	Appropriate Teacher Roles	Inappropriate Teacher Roles
Knowledge	Operates in a dialectical manner in presenting knowledge. Is open to new ideas and procedures. Uses pupil knowledge and competence in teaching. Presents multiple views	Adopts a didactic and dogmatic approach to knowledge. Inhibits or punishes student observations, values, or conclusions different from his

Values About	Appropriate Teacher Roles	Inappropriate Teacher Roles
	and expects students to form their own preferred meanings. Rewards creative, divergent behavior of pupils.	own, the textbook or other authority. Strives to have all pupils master the wisdom he prescribes for them.
Learning and the Learner	Views learning as an exciting and self-rewarding activity. Holds that learning how to inquire and problem solve is the primary goal of education. Recognizes that children have a natural inclination to learn; that they are curious, imaginative, and skilled at creating knowledge from experience. Provides pupils with a rich and varied array of topics, materials, and activities in his content area to stimulate further learning.	Views learning as unpleasant but necessary. Holds the memorization of information and mastery of conventional content to be the primary goal of education. Recognizes that children have to be forced to study and learn. Applies extrinsic rewards and punishments to force the pupil to learn prescribed content which is carefully laid out and precisely defined.
The Purpose of Schooling	Views schools as being child centered with his major responsibility for fostering the "will to learn." The teacher has power, competence and commitment in designing an environment rich in ideas, topics, and materials to stimulate and guide independent learning. Provides opportunity for students to identify their own learning goals, patterns, and routes within the broad outlines of institutional curricula. Expects pupils to be directly involved in the establishment and maintenance of practices which govern learning activity in the classroom and school.	Views school as being institutionally centered with his major responsibility to implement the policies and procedures of the principal, superintendent, or state department. The teacher has little power, competence or interest in major decisions about instructional procedures, programs, or materials. Rather he oversees the learning of students in the prescribed course of study. He does not encourage or allow pupils to question or become involved in establishing general school practices which govern learning activity in the classroom and school.

Values About	Appropriate Pupil Roles	Inappropriate Pupil Roles
Knowledge	Questions the values, assumptions, observations, and conclusions of authoritative sources of knowledge. Recognizes the utility of knowledge in solving problems. Selects and modifies the multiple ideas presented by teachers and authors to formulate his own meanings consistent with his experience and needs.	Does not question even obvious points of confusion in the values, assumptions, logic, and observations of the teacher or other authoritative sources of knowledge. Rather he credits such confusion to his own intellectual inadequacy. He rejects his own experience and feelings in favor of converging on the ideas of

Values About	Appropriate Pupil Roles	Inappropriate Pupil Roles
		authoritative sources, i.e. teachers, textbooks, experts.
Learning and the Learner	Pursues facts and information with zest about topics and problems he encounters. Organizes the information he obtains from teachers, other pupils, his own experience and other sources into inferences and hypotheses he can subsequently test and match to future experience. Enjoys learning and derives his primary pleasure from the learning activity itself.	Does not enjoy learning and views it as a difficult chore. Accepts the need to be forced to attend, "behave," and study. Derives his primary pleasure not from learning activity itself but from the rewards given by teachers. Rejects the leadership of other pupils in learning, seeking instead the teacher's direction.
The Purpose of Schooling	Is an active co-learner with the teacher. Selects many of his own problems, topics, and patterns of inquiry. Exhibits leadership and teaching in his areas of competence and interest. Seeks and accepts direction from the teacher and other pupils in areas where they are more competent than he.	Passively carries out the activities prescribed by the teacher or school. Exhibits mediocre task commitment and performance. Has and seeks no major responsibility in planning the content, topics, or patterns of his learning activities. Does not attempt to teach other pupils or accept instruction from other pupils in the classroom.

TRANSLATING ROLE DESCRIPTIONS INTO BEHAVIORAL INDICES

The pupil and teacher role descriptions derived from the basic value positions for process education are general descriptions of prevailing classroom normative expectations for pupil and teacher behavior. Each of these general descriptions can be broken down into a number of specific behavioral indicators useful in assessing the degree to which the appropriate or inappropriate roles are occurring in the classroom. For example if we take the general role description for the pupil, "Questions the values, assumptions, observations, and conclusions of authoritative sources of knowledge," we can generate a number of behavioral indices for this and the opposing pupil role, "Does not question even obvious points of confusion in the values, assumptions, logic, and observations of authoritative knowledge sources." Examples of some behavioral indices we might use to determine which role pupils in a classroom were adopting are listed below.

1. When the teacher makes an apparent error in reasoning or observation the pupil:
   ____ (+) calls attention to the error
   ____ (-) ignores the error

2. When the text or teacher says something which conflicts with earlier experience or other knowledge the pupil:
   ____ (+) questions the teacher or other source
   ____ (-) ignores the inconsistency

3. When the teacher or textbook shows the student a particular method of performing an activity or solving a problem, and the pupil knows or intuits another method he:
   ____ (+) uses his own method, defends and explains it
   ____ (-) rejects his own method in favor of the prescribed method

4. When studying a given topic, according to some authority, the student is:
   ____ (+) sensitive to and accepting of different viewpoints of others (peers, parents, other authors, etc.)
   ____ (-) insensitive to and rejecting of the different viewpoints presented by others

Each of these indicators could be used to tell an observer something about the role the student adopts and whether or not it is supportive of process education ideals.

Task 1

Look back to the general appropriate and inappropriate role descriptions for teachers and pupils in a process education curriculum. Try to translate some of these into some indices useful for classroom observation to determine if the methodology of a process education program was being implemented. A few examples are given to get you started.

PUPIL ROLE INDICES

1. Generally at any given instant different pupils are at work on:
   ____ (+) different tasks and/or activities
   ____ (-) identical tasks and/or activities

2. Student interest and persistence at a given task or activity is:
   ____ (+) maintained at a high level over an extended period of time without teacher supervision
   ____ (-) not maintained at a high level in the absence of teacher supervision

3. For any given task required of all pupils, different pupils:
   ____ (+)
   ____ (-)

   etc.

TEACHER ROLE INDICES

1. The teacher routinely manages his classroom such that all pupils are:
   ____ (+) engaged in a variety of learning activities and/or tasks at different times at different levels of proficiency and interest

____ (-) engaged in identical learning activities and/or tasks at a given time toward achieving mastery of specific content in unison

2. In talking with students the teacher routinely:
____ (+) raises provocative questions for students to ponder and expects multiple, divergent responses
____ (-) ask questions calling for specific convergent responses from students yielding up the teacher's predetermined "correct" answer

3. In planning instruction and measuring student progress through testing the teacher devotes his primary attention to:
____ (+)
____ (-)

etc.

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HANDOUT 3

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REPRESENTATIVE ROLE INDICES

A number of pupil and teacher role indices are provided below. Each of these is related to one or more of the basic value positions for process education and the derivative role expectations. Using these and similar indicators it is possible over a period of time to assess the degree to which the teacher and pupils in a given classroom are exhibiting behavior consistent with the goals of process education.

After you have examined these role indicators and compared them with your earlier notes and indicators produced in your previous activity further modify your indicators as you see fit in preparation for analysis of simulated classroom learning activities to be presented in a few minutes.

Pupil Role Indices

1. At any given instant different pupils are at work on:
____ (+) different tasks and/or activities according to individual need and interest
____ (-) identical tasks and/or activities according to teacher preference

2. For any given task required of all pupils, different pupils:
____ (+) use varied techniques, methods and/or procedures
____ (-) use one standardized, prescribed set of techniques, methods, or procedures

3. Students interact with one another and learning materials:
____ (+) spontaneously and naturally as if they were engaged in task-oriented play
____ (-) only as monitored directly through the teacher (as in a typical teacher dominated question and answer session).

4. Student interest and persistance at a given task and/or activity:
   ____ (+) is maintained at a high level over an extended period of time without teacher supervision
   ____ (-) is not maintained at a high level in the absence of teacher supervision

5. Conclusions, observations, and ideas reached by students following a given learning activity, topic, and/or task:
   ____ (+) are varied, divergent and often in conflict with one another
   ____ (-) are convergent, uniform and usually in agreement with one another

6. When asked to explain or justify a particular conclusion, idea, observation, method etc., students:
   ____ (+) defend their position on the basis of first hand experience, empirical observation, and perceptions of others.
   ____ (-) defend their position by appeal to the authority of a text, teacher, parent etc. (It's right because the teacher says so!)

Teacher Role Indices

1. Routinely during learning activities, tasks, and/or topics the teacher:
   ____ (+) plays a facilitative role acting as stimulus and knowledge resource to pupils as they work largely independently and in small groups
   ____ (-) plays a direct managing role holding all pupils' attention, eliciting, directing, and monitoring their overt behavior.

2. Routinely manages his/her classroom such that all pupils are:
   ____ (+) engaged in a variety of learning activities and/or tasks at different times and different levels of proficiency and interest
   ____ (-) engaged in identical learning activities and/or tasks at a given time toward achieving minimal levels of mastery of specified content in unison.

3. When dealing with content, topics, or learning activities for which there are a diversity of opinions, interpretations, facts, assumptions or conventions (i.e., other than denotatively agreed upon knowledge such as correct spelling, computation or alphabetic sequence) the teacher:
   ____ (+) dialectically presents multiple views, points out advantages and limitations to each, and encourages students to form their own preferred meanings and divergent interpretations
   ____ (-) didactically presents a particular cluster of views or interpretations, ignores their limitations and conflicts with other views and punishes or inhibits divergent ideas in his students.

4. The teacher physically arranges the classroom, learning activities, procedures, and materials to:
   ____ (+) maximize direct pupil experience and interaction with peers and learning materials in task oriented and/or exploratory activity while minimizing the need for his direct control and monitoring of student activity
   ____ (-) maximize his direct and continuous control over student activity and minimize student-student, student-material activity not strictly prescribed and monitored by him.

5. In planning of instruction and/or assessing of learning the teacher routinely devotes his primary attention to:
   ____ (+) specifying and measuring the process skills and variables related to "learning how to learn," e.g., analytic thinking skills, ideational fluency and flexibility, use of information sources and systems, planning to achieve goals, evaluating worth and validity of information etc.
   ____ (-) specifying and measuring facts, information, and specific concepts central to a given discipline, e.g., date of the Monroe doctrine, size of the planets, order of geological periods, styles of Elizabethan poets, name of the 23rd president etc.

6. In talking with students the teacher routinely:
   ____ (+) raises provocative questions for students to ponder and expects multiple and divergent responses
   ____ (-) asks questions expecting specific convergent responses from students yielding up the teacher's predetermined answer.

USING OBSERVATIONAL INDICES

Now that you have had an opportunity to examine the representative role indices provided on this Handout and to incorporate them with the ideas about indices you had generated earlier, you will be asked to apply them to the analysis of a simulation of classroom teaching-learning activity.

In recent years the Flanders interaction analysis system has been widely used. The Flanders and many related systems focus nearly exclusively on verbal interaction between teacher and student. In a properly functioning process education-oriented classroom the Flanders interaction analysis system frequently would be unable to provide useful information. You will now see a few color slides showing some important process education roles exhibited by pupils and teachers using an excellent process curriculum package.

Before proceeding, quickly review your role indices, select those you will use to observe the simulated classroom activity. You may wish to use those you have developed in conjunction with those listed on the previous handout.

Task 2

Now watch the slides* to be presented and rate the pupil-teacher classroom roles using the indices. You may wish to observe the slides carefully and quickly complete the rating immediately after the observation. Check each item in the + or - category depending upon your overall impression.

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*In the workshops run by H. Cole 70 color slides of children using the Materials and Activities for Teachers and Children, House of Ancient Greece curriculum are used. In carrying out this activity any filmed or real classroom situation may be used. Video taped portions of classroom activities are also suitable. However, to illustrate the primary point, the classroom simulation ought to involve student centered, group process inquiry approaches and not the perhaps more typical teacher dominated question and answer session. Of course, you may want to use both types of situations for purposes of comparison and contrast.

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HANDOUT 4

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EXAMPLE PROBLEM 2

EVALUATIVE INDICES: A GENERALIZING EXPERIENCE

Task 3

Read the description of the career education program provided below. After you have read the description of this program and its objectives do the following:

1. Write four short paragraphs which list the major roles

   a. appropriate to the teacher
   b. inappropriate to the teacher
   c. appropriate to the pupil
   d. inappropriate to the pupil

   Construct your role descriptions, both the appropriate and inappropriate ones, with direct reference to the objectives and assumptions of the particular curriculum innovation described in the above paragraph.

"Work and Play, Me and Others"

This program has as its main objectives increasing the child's attention and awareness of 1) his own likes and dislikes, 2) the way he is perceived by others, 3) the way he perceives himself, 4) what tasks he personally views as work and what tasks he views as play, 5) the way he perceives other adult persons and the status he assigns to them because of the work they do, 6) the varieties of career activities engaged in by persons who live in his own community and region, 7) the feelings these persons have about themselves, their status, the importance of their work, and 8) the relative responsibilities, rewards, expectations and demands encountered by various persons at different levels in their career development as perceived by themselves and others.

There are no pupil materials in the program. Rather there are extensive suggestions, activities, questions, topics and resources listed for teachers in a set of teacher guides. The activities suggested in the guides are organized around the major objectives described in the above paragraph. Typical activities involve students 1) doing a study of their own classroom normative patterns with respect to what is work and what is play, 2) interviewing adults in the community at their place of employment about what they do and how much they like and value what they do etc. on many field trips, 3) bringing groups of local community adults firmly established in their careers as well as those just beginning or currently engaged in upward career mobility and career crises into the classroom frequently for frank discussions of issues relating to the objectives.

Students use standard reference sources, special reference sources and current periodicals typically found in any school library. The major purpose of all activities is to have the students become more aware of career families, choices, problems, issues and opportunities. Teachers are encouraged not to suggest over-simplified solutions but rather to assist the child to inquire about himself and the world of work around him toward becoming more aware and informed. It is assumed that such an approach will enable the child to have more control over his fate and exercise more wisdom in the many career development decisions he will subsequently be forced to make as an adolescent and adult. The program is suggested as a grade 6-9 sequence. The program developers feel it should not be simply appended to the social studies curriculum, but dealt with as a major curriculum component in its own right.

Appropriate Teacher Role

Inappropriate Teacher Role

Appropriate Pupil Role

Inappropriate Pupil Role

2. Next generate 5 or 6 operational, observable indices from the role descriptions. Develop each index as a continuum with an appropriate (+) and an inappropriate (-) end. Construct indices that would be useful to you or any other observer to determine how well the new career education curriculum was being implemented.

Indices for Teacher Behavior

1.
____ (+)
____ (-)

2.
____ (+)
____ (-)

etc.

Pupil Indices

1.
____ (+)
____ (-)

2.

___ (+)
___ (-)

etc.

Other School/Community Indices

1.

___ (+)
___ (-)

2.

___ (+)
___ (-)

etc.

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HANDOUT 5

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EXAMPLE ROLE DESCRIPTIONS FOR
"WORK AND PLAY, ME AND OTHERS"

Appropriate Teacher Role

Teacher sees as his main function helping the student attend to and learn more about how he is perceived by others, how he perceives himself, how he perceives others, what he views as work and play and how others are similar and different in their views of what is work and what is play. Teacher is primarily concerned with gathering and organizing material from various sources for student use, with contacting, bringing in and making arrangements for a wide variety of persons in the community and region from different career areas and at different stages of career development and success and failure to interact directly with students. Teacher supervises, suggests and helps students complete interviews, field trips, projects, etc., all concerned with first hand experience designed to help students learn more about what work is, why people work, how they feel about it, and how they

Inappropriate Teacher Role

Teacher sees as his main function the imparting of information to the student about the various types of jobs available in the community and region and the types and levels of academic and social skills required for entry into those jobs. Teacher is primarily concerned with gathering information about occupations, their requirements, statuses and organizing this information into structured presentations to his class. If he brings persons into the classroom it will be primarily for them to present similar types of structured information about their jobs and what they do, <u>not</u> to explore how they feel about their job, the aspects of their jobs which they view as work and the aspects they view as play. This teacher would <u>not</u> consider bringing in persons experiencing some form of career crisis, e.g., being fired, layed off, not promoted, etc. Teacher does <u>not</u> view the student's perception of himself and of others as relevant content for the task of preparing for the world of work. Teacher evaluates student

Appropriate Teacher Role	Inappropriate Teacher Role
come to do the work they do. Teacher evaluates student learning and progress through sociometric activities and determining the degree to which the student's perception of himself agrees with his perception by others and the consistency with which the child's expressed likes and dislikes are reflected in his choice of tasks in the ongoing activities of the classroom.	progress by testing for knowledge of specific cognitive information, e.g., How many M.D.'s practice in Centerville? What is the average income of a secretary in Lexington? How much and what type of special training is required to become a tool and die maker?
Appropriate Pupil Role	**Inappropriate Pupil Role**
Pupils interact directly with many adults brought into the classroom or visited individually and collectively through field trips. Students construct, administer, and interpret questionnaires, interviews, surveys and gather information first hand about 1) what people do for work, 2) why they do it, 3) what they like and don't like about their work, 4) what they would do differently if they could do it over, 5) how they got to do what is their work. Students question and survey each other and members of their family to determine what tasks different individuals view as "gottados" and "liketodos" and why one person's "gottado" is someone else's "liketodo." Students use references and information sources as the occasion arises when they need to check an hypothesis, opinion, idea or feeling or when they are simply curious.	Pupils interact exclusively with the teacher and a textbook and its related materials. Their primary task is one of reading the text, listening to the teacher and trying to assimilate and understand the concepts that the teacher and text have set forth to be learned. When they are not listening to the teacher or reading their text they are typically engaged in answering convergent questions with predetermined correct answers about the material as in typical "homework" or "seatwork" or in clipping articles and pictures from magazines about different jobs and the amount of education they require, to construct a bulletin board. Students are almost totally externally and extrinsically oriented in terms of gathering information about work depending upon others' concepts and converging towards them in unison.

SAMPLE EVALUATIVE INDICES FOR "WORK AND PLAY, ME AND OTHERS"

These are some general indices which might be useful in assessing the degree to which the curriculum described earlier had been implemented.

1. Teacher assesses student progress
   ____ (-) strictly through factual tests requiring specific knowledge of textbook or "lecture material."
   ____ (+) through a variety of procedures including the usual type of tests, evaluation of student projects, sociometric procedures,

observations of student skill in organizing and conducting surveys, consistency of students' actual choices with their expressed beliefs, likes and dislikes.

2. Teacher in the course of planning and carrying out instruction
   ____ (-) seldom or never contacts, seeks out and involves other adults, relying only on self and the text.
   ____ (+) frequently contacts, seeks out and directly involves other adults in both planning and instruction.

3. In the use of outside resources, speakers, and materials, the teacher routinely presents such resources as
   ____ (-) pools of information and facts to be attended to and learned according to some previously established content outcomes.
   ____ (+) situations designed to raise basic questions about who people are and what they like and don't like and how their likes and dislikes relate to their work and their choice of work.

4. In the assignment of student projects and homework, the teacher typically
   ____ (-) requires all students to carry out the teacher's directives or those of the textbook toward mastery of certain content concepts about work and careers which are to be taught using external authoritative information sources, e.g., text, reference works, speakers, teacher.
   ____ (+) requires and assists students in seeking, collecting and organizing information first hand from their own experiences and environment toward building an informed, rational and personally relevant set of feelings and concepts related to work, personal choice and self understanding.

5. In interaction with students in class discussions and other activities the teacher strives
   ____ (-) for closure and consensus of student response around the teacher's or textbook's predetermined content objectives, constructs, values and perceptions.
   ____ (+) to have each student determine what he will choose to believe and do about a given issue or problem and why he does so and what consequences his beliefs and acts may have for himself and others now and later.

6. The teacher in dealing with any issue related to career status, mobility demands, etc. presents himself or the text as
   ____ (-) the authoritative final judge of the correctness of a given position, or idea, or student response.
   ____ (+) an individual who has strong beliefs but who remains curious about such issues and is capable of seeing them from many perspectives different from his own.

7. The teacher encourages, expects and rewards
   ____ (-) conformity of student response, learning activities, projects, beliefs, opinions about topics and issues encountered in the curriculum.
   ____ (+) diversity of student response, learning activities, projects, beliefs, and opinions about topics and issues encountered in the curriculum.

8. In planning and carrying out instruction about career education
   ____ (-) the teacher involves only respectable, authoritative experts and sources of career information, e.g., local professional people, commercially developed career education programs and source books.
   ____ (+) many different persons including bus drivers, janitors and secretaries from the school, parents of students, barbers, farmers, paper boys, drop outs, housewives, attorneys as well as materials gleaned from local newspapers, magazines, political speeches, news opinions, etc.

USING SUCH INDICES

Note that information on the above indices can be gathered from direct observation of teacher's classes over a period of time, discussions with those teachers, examination of their test and testing-grading procedures, examination and discussion of their lesson planning, examination of student homework and projects assigned as well as the examination of the students' completed homework and projects and the teacher's resulting evaluative comments, assigned grades and verbal interaction with given students.

If one wishes, it is possible to make more specific classroom indices which might concentrate more on pupils' activities, roles, responsibilities and achievement. Several of these are provided as an example.

1. In the completion of homework and projects, students usually
   ____ (-) work at a minimal level, showing little enthusiasm for the task and much task avoidance.
   ____ (+) become excited and highly involved showing great enthusiasm and task persistence.

2. In carrying out classroom assignments, most students
   ____ (-) are primarily concerned with converging on the "right answer" to a previously teacher formulated problem or task.
   ____ (+) are primarily concerned with developing some sort of rational-logical answer or solution to a specific issue or problem.

3. In class activities students can routinely be observed
   ____ (-) working entirely alone with no direct contact with one another.
   ____ (+) working with other children in groups which are cooperative and which require each member to contribute to the group task.

4. In teacher-student classroom activity dealing with the curriculum content, students
   ____ (-) never speak to or interact with one another directly, only through the monitoring or approval of the teacher.
   ____ (+) engage in spontaneous and sometimes direct interaction with one another, references and resources without direct teacher monitoring.

5. When students in the classroom are assigned a task, either individual or group, and they begin it and the teacher leaves
   ____ (-) students cease working at the task and do other things.
   ____ (+) students complete working at the task and pay no attention to the absence of the teacher.

The purpose and philosophy of the curriculum under discussion calls for pupils to interact with one another in ways suggested by the above indices. To be properly implemented students should be interacting in this fashion. Of course, if they are not, it may not be the teacher's fault. A number of studies have shown that innovative curricula often fail to be used properly even when the teachers using them are committed to the program and trained to use it (Cole, 1972, p. 119). The students also must learn new roles and new responsibilities which go with those roles. This is often a very difficult obstacle to overcome. It requires patience and persistence on the part of the teacher to change such pupil classroom behavior patterns.

SOME OTHER INDICES

There are many other ways to collect information about the degree to which a curriculum innovation has been implemented. Any of these methods depends upon a clear notion of what the curriculum is, what it is supposed to achieve and how the roles it poses for students and teachers are different from the non-innovative traditional program it is replacing.

Students as Observers

It is possible to collect useful information on program implementation from the students themselves. Here are a few examples of some simple questions which could be asked of students about the "Work and Play, Me and Others" curriculum. These questions, as were the above indices, are designed to yield information about important teacher-pupil roles. Questions like these can either be administered in written form to all students or administered in a structured interview with a random sample of students drawn from teachers' classrooms. In the latter case the questions can be used in an open-ended way without the multiple choice responses. Questions like these provide information from multiple student observers about classroom operation of the program.

1. How did you learn most of the material in the "Work and Play, Me and Others" lessons you have completed this year?

   a. from the teacher telling you the right answer.
   b. from talking with other students and other people about problems and questions, and thinking about these problems and questions yourself.
   c. from reading books and answering homework and test questions about what you read.

2. When you were doing classroom lessons in the "work" program, did you often have people other than the teacher come into your classroom to talk with you and help you on projects?

   a. Yes, many different people came in lots of different times to work with us.
   b. A few persons came in once in awhile.
   c. No, the teacher was the only one who taught the lessons.

3. If people did come into the classroom as part of your "work" lessons, what did they do mostly?

   a. Talk with the teacher.
   b. Tell us what they do and how much they had to go to school to learn what they do.
   c. Tell us what makes them happy and unhappy about their work.
   d. Tell how they got to do what they are doing.
   e. Answer our questions.

   Please explain your choice.

4. Please indicate how much you have learned about each of the following things because of your class activities in the "work" program. I have learned

	Nothing	Not much	A little	A lot
a. The different kinds of jobs people do.	1	2	3	4
b. About myself and what I like to do.	1	2	3	4
c. About my friends and what they like and don't like.	1	2	3	4
d. How much education it takes to do different jobs.	1	2	3	4
e. About the kind of person I am.	1	2	3	4
f. About the kind of person my friends think I am.	1	2	3	4
g. About the many different people who live and work around here.	1	2	3	4
h. About what these people like and dislike about their work.	1	2	3	4
i. About how people get to do work they like to do.	1	2	3	4

Still another way to collect such information is to obtain a sample of parents and ask them some questions like these:

Did your child ever talk with you about the new "work" curriculum he is participating in?

What did he say about it?

What do you know about the program?

Did you ever get involved in any of his projects or help the teacher with a class activity? Were you ever asked to?

Using Standardized Measures

With the proper implementation of a curriculum like "Work and Play, Me and Others," it would be reasonable to expect gains in social interaction and self perception-self concept skills. There are a variety of psychological, social and sociometric diagnostic systems available appropriate to measuring such outcomes. Examples would be the Barclay Classroom Climate Inventory (Barclay, 1972), the "My Classroom" instrument developed by Herbert J. Walberg at the University of Illinois, the SRA Diagnosing Classroom Learning Environments (Fox, Luszki & Schmuck, 1966), and Problem Solving to Improve Classroom Learning (Schmuck, Shesler & Lippitt, 1966). Any one of these resources would be valuable in determining to what degree the curriculum had reached important student outcomes. Achievement of students might also be measured on various vocational maturity scales such as those developed by Crites and Super (Crites, 1973; Cole, 1973).

Programs of the type which have been demonstrated and described here are also directly concerned with promoting skills basic to creative thinking and feeling. One excellent source of scales, standardized tests and procedures to measure curriculum outcomes in creative thinking and feeling skills is the Williams Total Creativity Program (1972). Volume I, Identifying and Measuring Creative Potential and Volume III, the Teacher's Workbook collectively provide and index scores of available techniques and scales for measuring skills basic to creative behavior.

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Technology Publications, 1972. (See especially Volume I, Identifying and measuring creative potential and Volume III, Teacher's Workbook).

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HANDOUT 6

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CASE STUDY

APPLICATION OF EVALUATIVE INDICES
TO A TEACHER EDUCATION PROGRAM

An actual problem concerning an introductory teacher education program is presented below. Working in small groups, read the problem and then discuss it and the questions which follow the problem. After you have finished you will be presented with one set of solutions to the problem.

Problem

An introductory course at a large university requires all students to complete a field project. There is a general feeling among the faculty that it is "good" for students to engage in a practical experience along with their study of theoretic and conceptual material in the learning theory and human development course. Therefore, students are required to apply for and complete a field experience in some actual school setting. They apply for the experience through the college "Office of Field and Laboratory Experiences."

The following problems result after the program is instituted. Many students feel hostile toward the requirement. Much indecision on the part of students is evident concerning what they should be doing. Different instructors in different sections give quite different reasons for doing the field experience. Some instructors want students to observe "good" teachers. Other instructors want students to "interpret" classroom behavior of students in terms of course theories. Still other instructors want students to write reviews of psychological studies or do a case study of a given student. Some instructors advise students to criticize teachers or not to observe at all because basically "classroom teachers are incompetent."

Out of a total of 110 possible points for a course grade, only a maximum of 10 can be earned by the field experience. Consequently, many students do not do a field experience even though they signed up for one as required. The college office of "Field and Laboratory Experiences" assigns students to teachers in the local schools. Many students never show up or go to the classroom only once or twice. Some students prepare logs of fake field experiences which they never participated in.

Some students do show up and they and their teachers try to carry out the field experience. This group often encounters the problem, "What should we do?" Both the teachers and students wonder what they should do. Mostly the students sit and observe the teachers. Generally, the teachers feel uneasy about this and the students are bored after the first two or three classes.

The teachers and administrators in the local school district which provides the field experience setting become angry and frustrated. Much dissatisfaction is expressed with the "field experience" project by students, instructors, local school teachers and administrators. Generally, the course is rated as unfair and unpleasant by students. Most professors want to avoid teaching the course.

Upon looking into the course objectives it is learned that there are no broad educational objectives stated as the purpose of the course. There are many specific behavioral objectives stated for the content of particular textbook chapters and other specific articles which form the content of the course. There is also no rationale for either the selection of course content and topics, the field experience or any other aspect of the course.

Questions

Suppose you took an interest in the problem of making the field experience relevant and meaningful to students, instructors and the teachers in public schools within this course:

1. What types of informal indices are available which provide information about the program's present success or lack of success?

2. How would you go about planning for an effective field experience for students? List step by step the things you would do and explain why you would do them.

3. How would you define and evaluate a successful field experience for these students?

4. What types of indices would you need to determine if the program was working as intended?

5. How typical or atypical is the situation described? Have you witnessed similar situations in your own institutions?

6. What causes such situations to exist?

After you have worked on this problem, an analysis of the problem and one set of possible solutions will be shared with you.

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HANDOUT 7

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CASE STUDY

Analysis of the Problem

1. The basic problem is the lack of broad objectives and a rationale for the entire course. It is not sufficient to write behavioral

objectives for specific areas of content. To develop a purposeful and functional program one must have clearly stated but broad educational goals which then allow the content topics, learning activities and experiences to be selected toward achieving those broad goals.

2. Another related basic problem is that there was no agreement among the faculty who taught the course about broad goals. Rather they agreed only upon a particular common text, sequence of topics and specific behavioral objectives for each unit (Chapter) in the book. They thought the field work was a "good" idea but did not formulate a rationale for the requirement or plan for its useful implementation. There was little communication among any of the groups involved. The field experience setting personnel were not involved in planning or developing the program. The supervising teachers in the field were not even asked to rate the students assigned to them. Indeed there were no criteria for doing so.

3. Although the field experience was required it counted for so little toward the course grade that it was not worth much to students. It can also be inferred that instructors really did not value or view the field project as an important part of the student's instruction, compared to other aspects of the course.

4. Requiring the students to apply for a field experience, assigning them to an actual teacher and having so little credit given for the work and so little rationale for the experience resulted in

   a. Non-committed and hostile students
   b. Confused students
   c. Confused teachers
   d. Student absenteeism and dishonesty
   e. Supervising teacher anger, frustration and rejection of the program
   f. Student condemnation of the requirement and the course
   g. Instructor condemnation of the students, supervising teachers, administrators and the program

None of these groups were "bad" people. They were all "nice" and competent people. All acted as people generally can be expected to act in equally unstructured, unplanned, confusing situations.

The program became a disaster. There were abundant accurate indices of this state of affairs, including poor student attendance, avoidance of teaching the course by professors, poor student ratings of the program, large numbers of complaints by students, college instructors and supervising teachers to counselors and other instructors, and unwillingness of almost everyone involved to continue the field experience component of the program.

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HANDOUT 8

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CASE STUDY

Goals, Rationales, Procedures--Building A Plan

1. The first thing needed was a set of broad goals and a rationale for the entire program as well as its field experience component. These could not be imposed. They were thought up and proposed by one or two people to many others involved with the course including the people who regularly taught the course, other professors who taught courses which followed this first course, some key administrators in the college, some of the field experience administrators and supervising teachers, and some university students who had been enrolled in the program. As goals were proposed, they were modified and revised following meetings with these people in small groups. Finally, the broad goals and their rationales including the field experience component were prepared and presented to instructors, field experience supervising teachers, students and other faculty members who agreed upon their appropriateness.

This set of broad objectives and rationales was then used as a general guide to select content topics, plan learning activities and develop teaching methodology and course operation consistent with the broad course objectives and their rationale. Process skill objectives, concerned with the general types of skills teachers should develop to be effective teachers, added an important dimension to the course which helped specify, design and select from among many instructional and procedural alternatives. The development of these goals and rationales was a long process requiring two or more years. It was conceived as an ongoing growth and renewal activity within a general set of objectives and procedures by sensible and competent people.

Principles

1. One can't have a program without broad goals and rationales which are basic for planning and decision making.

2. If the program is to serve many groups and involve many people, those groups must be represented in the formulation of the broad goals and their rationales.

3. Once formulated the goals and objectives need to be disseminated and discussed among the larger membership of each group involved. Acceptance for the program must be earned and established if it is to work.

4. Process goals are useful for helping plan instructional means and methodology consistent with end goals. They can help prevent situations where instructors fail to "practice what they preach."

5. Before one can evaluate a program or produce indices to determine its success, one must have goals, rationales and plans as criteria from which to

   a. Plan and implement the program
   b. Develop indices
   c. Determine progress

The first job in developing evaluative indices for a program is often to conceptualize and plan the program and then implement it.

6. Rome wasn't built in a day! Patience is a virtue. The name of the game is adaptive, healthy planned change and renewal as an on-going process. Today's innovation is tomorrow's outdated program.

Exhibit A

Below is a brief statement of the course goals, rationale and plans developed and used to design and operate the program. Each of the objectives had a more detailed rationale prepared for it than can be presented here. Figure 1 shows the overall structure and operation of the course. Figure 2 shows the broad evaluative arrangement for assessing student performance in each area. Note that the field experience was presented as a primary component of the course. Students were given a detailed description of how much each component would count toward their grade and how their performance would be evaluated (Table 1).

COURSE GOALS

The general learning objectives and remarks which follow are intended to provide you with an overall framework with which to understand the content and structure of the course. Perhaps the information provided will make more clear to you the relationship of this course to your preparation as a teacher. The broad objectives of this course are stated first, followed by an explanation of course content.

Broad Objectives

1. To develop competence in process skills, such as interpersonal regard, fluency and flexibility of perceiving, thinking and feeling.

2. To assist students in comprehending and applying the main but divergent theories and knowledge about human learning and development for purposes of:

   a. Planning and carrying out rational and humane instruction.

   b. Categorizing observed instructional methods, materials and practices according to their functional assumptions and underlying theories.

   c. Questioning their own and others' beliefs and preferences toward developing their own rational belief system about learning, development and instruction.

3. Provide a first time field experience for students to actually work in a teaching related capacity toward:

TABLE 1

CONTRIBUTION OF VARIOUS ACTIVITIES TOWARD POINTS

Activity	Maximum Points		% Contribution to Final Grade		Points Calculated By
	per activity	cumulative	per item	cumulative	
I. Standardized Unit Tests on Core Units	36	36	28.1	28.1	(Number of items you had correct ÷ total number of items across all core unit tests) x 36
II. Instructor Assigned Tasks to Assess Your Ability to Apply Core Unit Concepts	18	54	14.1	42.2	Determined by you and your instructor. Will be some fraction of 18 points
III. Standardized Unit Tests on Any 6 of the Self Study Units	24	78	18.8	61.0	Four points for each self study unit with 80% mastery or better to a maximum of 24 points (6 S. S. Units)
IV. Completion of the Field Experience and the Accompanying Prospectus, Daily Logs, and Summary Statement	30	108	23.4	84.4	Teacher evaluation and your project reports are rated as a letter grade which is converted to points according to Table 3
V. Completion of 4 Mini Courses of Your Choice	20	128	15.6	100.0	Mini course instructors assign you 5 points for each mini course, provided you 1) are prepared, 2) are on time, 3) actively participate

a. The interpretive and applicative use of theory to instruction.

b. The gaining of practical experience and insight into the teaching process.

c. Deciding whether or not to become a teacher.

Course Content

The primary content of the course includes theoretic and empirical knowledge about human development and the psychology of human learning. These topics form two major portions of the course. A third portion concerns techniques and procedures for the application of this knowledge and theories to teaching. A fourth portion is the process skills which are modeled for the students by the instructors and encouraged in the students through the various learning activities students individually select from among the many options.

Process Objectives

In addition to the broad course objectives there are several process or skill objectives which underlie this course. These process objectives are really clusters of skills which are used over and over again in teaching. These skill clusters or process categories are very basic and simple. There is virtually no area of teaching activity which does not depend upon their use. Many students will already have developed these basic skills to a high level prior to this course, but all students should be able to further develop their competence in these skill areas through their class activities and field projects. Each process or skill objective describes a general type of performance useful to many aspects of teaching. The seven skill areas are briefly described below.

Recognizing and constructing operational statements and definitions.

Making observations, constructing inferences and distinguishing between them.

Using multiple theoretic and conceptual frameworks of learning, motivation and development to observe, infer, predict and explain how and why people act the way they do.

Showing respect for or regard toward other persons, especially one's students.

Recognizing, questioning and clarifying one's beliefs, values and preferences and recognizing and tolerating value systems different from one's own.

Expressing ideas, feelings, information and concepts in multiple ways.

Achieving and exhibiting competence and enthusiasm in academic content specialty areas in which one expects to teach.

These seven categories of process skills are closely related to the broad objectives for the course. Achievement of the broad course objectives requires the student to use most of these process skills. In later courses you will learn how to design instructional objectives and activities, manage the classroom, design and interpret tests, describe and report pupil progress and design interesting and varied ways of teaching the topics of your subject specialty. All of these tasks depend upon the use of the process skill categories listed as basic objectives for this course.

Course Operation

There are some common requirements in the basic core content units of the course as well as many individual options. This allows students to tailor much of the course to their own needs and interests. Much of the work in the course depends upon the students' own planning, choice of options, and responsibility in completing the activities selected. It is felt this provides practice in developing important process skills for students and provides them an alternative model to the usually highly teacher directed instructional choice paradigm.

Class Meetings

Classes meet twice a week for the first 6½ weeks. For the next 3 weeks there are no regular class meetings. This period is used for mini courses and self study units. Classes resume for the next two weeks followed by another two week recess for self study units and mini courses. Regular classes meet again during the last 2 weeks of the course.

Course Requirements and Options

The course is designed around six core units. Students are required to complete the core units at a mastery level and, in addition, engage in work in four other areas. Performance of students is evaluated across all five components of the course. The options available to students as they plan their individual program are partially represented in Figure 1. The evaluation procedures for each option are partially represented in Figure 2.

Mastery Learning Approach to Grades

Particular content topics, textbooks, readings and learning activities are selected within the framework of the overall course objectives. Furthermore, specific performance objectives are stated for each core unit and self study unit. Test items for each of the multiple forms for each unit are sampled from across these stated objectives. Both specific unit performance objectives and unit test items are sampled from within the broad course objectives. Multiple forms of each test are used to enable re-testing of given units by students to facilitate diagnosis and learning. Tests are scored as soon as they are completed and students are provided with written feedback sheets which provide additional instruction about each item and its related content. Students selecting responses other than the keyed response are allowed to defend their choice in writing and if their choice is logical they receive credit for the item.

FIGURE 1

STUDENT REQUIREMENTS
AND OPTIONS

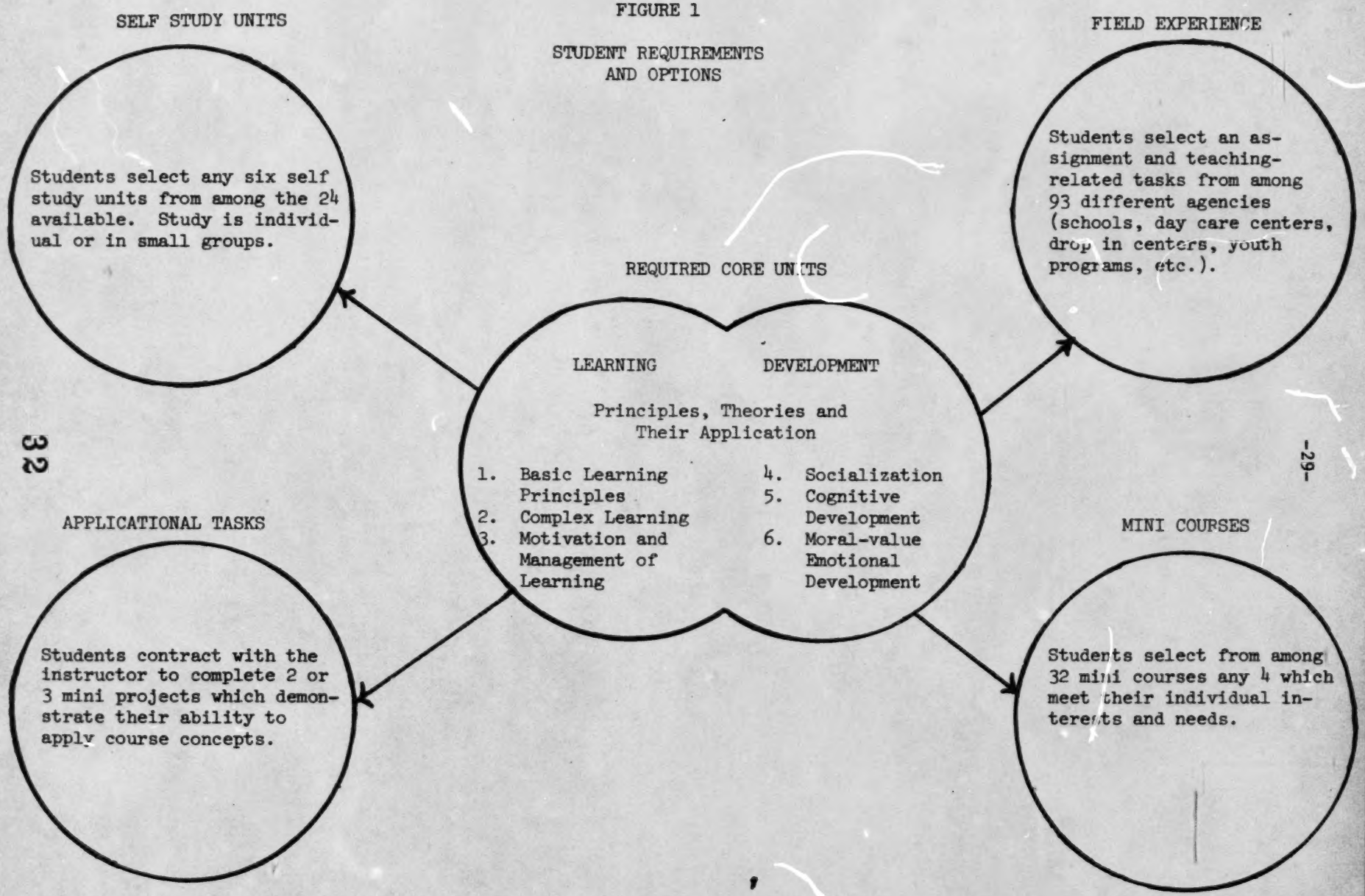
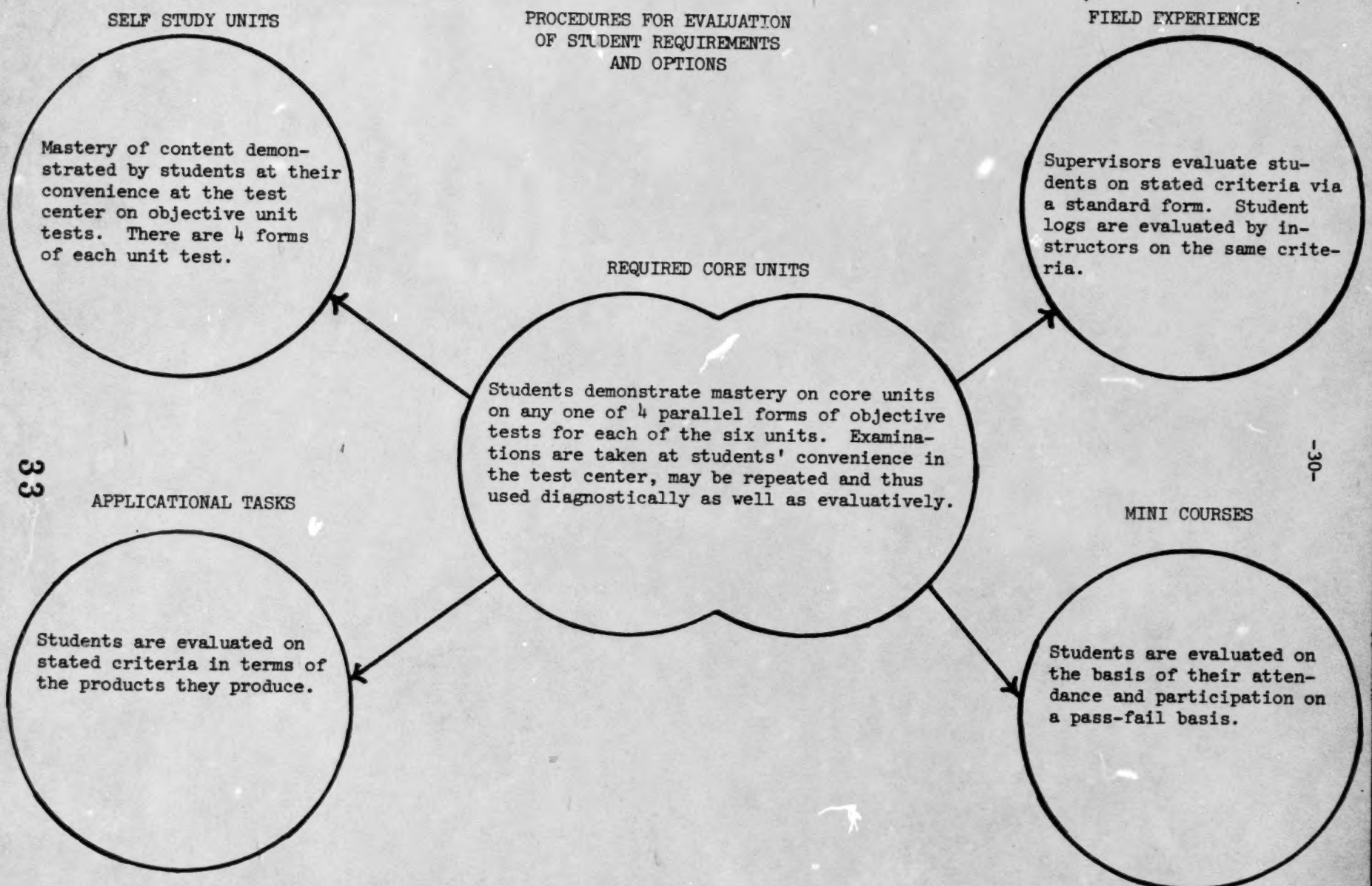

SELF STUDY UNITS
Students select any six self study units from among the 24 available. Study is individual or in small groups.
FIELD EXPERIENCE
Students select an assignment and teaching-related tasks from among 93 different agencies (schools, day care centers, drop in centers, youth programs, etc.).
REQUIRED CORE UNITS
LEARNING
DEVELOPMENT
Principles, Theories and Their Application
1. Basic Learning Principles
2. Complex Learning
3. Motivation and Management of Learning
4. Socialization
5. Cognitive Development
6. Moral-value Emotional Development
APPLICATIONAL TASKS
Students contract with the instructor to complete 2 or 3 mini projects which demonstrate their ability to apply course concepts.
MINI COURSES
Students select from among 32 mini courses any 4 which meet their individual interests and needs.

FIGURE 2

PROCEDURES FOR EVALUATION OF STUDENT REQUIREMENTS AND OPTIONS


SELF STUDY UNITS
Mastery of content demonstrated by students at their convenience at the test center on objective unit tests. There are 4 forms of each unit test.
FIELD EXPERIENCE
Supervisors evaluate students on stated criteria via a standard form. Student logs are evaluated by instructors on the same criteria.
REQUIRED CORE UNITS
Students demonstrate mastery on core units on any one of 4 parallel forms of objective tests for each of the six units. Examinations are taken at students' convenience in the test center, may be repeated and thus used diagnostically as well as evaluatively.
APPLICATIONAL TASKS
Students are evaluated on stated criteria in terms of the products they produce.
MINI COURSES
Students are evaluated on the basis of their attendance and participation on a pass-fail basis.

Grades and testing are viewed in a mastery learning framework. Criteria are set ahead of time for student performance in each area of the course.

Teaching Methodology

Teaching methods used include lecture but many other activities as well. Gaming, simulation, role playing, group tasks, and psychodrama are all techniques frequently used by instructors. Instructors meet frequently to exchange ideas and techniques for presenting course content in interesting and effective ways while also enhancing the process skills stated as objectives for the course. An instructor's manual which describes techniques for teaching course content in ways designed to enhance interpersonal regard, fluency and flexibility of thought, value clarification and other process goal outcomes has been prepared for the introductory unit. A complete manual for all units is in preparation.

Student Reaction

Students have generally been very positive in their evaluation of the course, its instructors, content and procedures. Students' criticisms and suggestions have been used to make important changes in the program. Student representatives meet biweekly with the instructors to critique the course and plan further adaptive changes.

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HANDOUT 9

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CASE STUDY

Operationalizing Plans and Objectives

To implement the program each component was operationalized by first identifying and selecting from among options to achieve the intended broad goals and process objectives. In the interest of time and space, the remainder of this activity will be devoted to illustrating how the field experience component was operationalized and evaluated.

After the basic rationale for a field experience had been developed and agreed to by a number of people, the next task was to carry out the planning to insure the activity could occur.

A first step in this process was seen as communicating to each new group of incoming students the basic rationale for the field experience component. A second step was determining the range and type of field activities which would be appropriate for university preservice teachers and help meet course goals while also being appropriate to the needs of supervising teachers and their students in the region's schools. A third step was to arrange for the students, their field supervising teachers and campus instructors to formulate and use standard criteria and procedures for first determining each student's

personal field experience objectives and then evaluating his or her progress toward those objectives. A fourth step was to enhance communication in both planning and evaluation of student field experience between university instructors and field supervising teachers, both groups of whom were too busy to visit one another. A fifth step was to seek and collect data on the perceived utility of the activity from various sources and to use this data as feedback to the different groups involved in order to strengthen the program. Each of these steps was completed in the following manner.

1. Rationale for Field Experience

The course syllabus which all students receive included a rationale for the field experience written by the course instructors as well as an interesting and informative paper written by a former student who had a highly successful and satisfactory field experience. In the interest of space, only an abbreviated rationale is presented as Exhibit B.

Information was also provided about how long the field experience was to last and how it should be applied for. Students were also provided with a listing of contact persons and telephone numbers for more than a hundred educational agencies and settings other than public schools in which appropriate field experiences could occur.

Principles

7. If there is a good reason for doing something, take steps to explain the reason for the activity (Exhibit B). Enlist other persons from the client group (in this case, the students) to help you communicate the rationale for the activity.

8. If you ask people to invest major effort in a given activity, restructure the reward system so that they will receive proper compensation for the activity (sometimes called putting your money where your mouth is!). In this case this involved changing the contribution of the field experience to the course grade from an insignificant amount to 23 percent of the final total course grade (Table 1, Exhibit A in the previous section).

9. Provide the client group (in this case students) with some specific procedures, guidelines and assistance in meeting the requirement to increase the probability of their having a successful experience. In this case this involved assisting the students in making application for field experiences in local schools, developing a list of agencies, other than schools, where field experiences could be obtained complete with telephone numbers and addresses of key persons, providing lists of appropriate activities for the field experience (Exhibit D below) and providing information about general expectations and criteria for the evaluation of the activity (Exhibit E below).

Exhibit B

A Word About the Field Project

The purpose of the field experience is to provide you, the prospective teacher, a first time to actually work in a classroom or some other educational

setting, with teachers and children, and to engage in the use and study of educational materials and processes toward:

a. The interpretative and applicative use of theoretic knowledge about learning and development acquired in course content to practical situations.

b. Gaining practical experience and insight into the business of classroom teaching and its related tasks.

c. Practicing and becoming more adept in the basic process skills which are described in the process objectives of this course and which underlie successful teaching.

d. Deciding whether or not to become a teacher.

All students are required to engage in a field experience in a classroom or other type of educational setting. The minimum duration acceptable is a two hour involvement one day a week for a period of six weeks. In the field, the student is engaged in a variety of activities. This range of activities is described in the attached Appendix B which lists appropriate activities and explains the manner in which the student should conduct himself in the field setting.

You will also receive a paper written by a recent student which gives many good tips about how to make the most of your field experience.

Your instructor will aid you in completing the forms necessary to make application for field placement in a school.

2. Range and Type of Appropriate Field Activities

To determine what types of activities constituted a successful and appropriate field experience several procedures were undertaken. First, one section of the program had been offered as an "experimental" section. This section had a large component of field experience as a requirement, but again little specification in terms of appropriate activities for students or criteria for evaluation. Three outstanding students in this section who were judged by their field supervisors and campus instructors as excelling in their field work were interviewed about their activities. Their instructors and field supervisors were also interviewed. Daily logs of other outstanding students in the regular sections were also reviewed. From these sources, a number of highly appropriate field activities emerged. Others were added by campus instructors on the basis of their prior experience with successful field experiences and in relation to course goals. A sixty-five item questionnaire was constructed around this range and variety of field activities. In the next term, after completion of field experiences by new regular and experimental sections the Activity Preference Questionnaire (APQ) was administered to all groups. The new experimental groups had been given a listing of the categories of suggested field experiences.

The results of these procedures are shown in Exhibit C below. Table 1 shows the dimensions of the APQ scale. Tables 2, 3 and 4 show the groups it was administered to and the results. Subsequently, the results of these studies were prepared as a set of suggestions for students, instructors and field supervisors. These were distributed to all students and instructors.

Exhibit C

TABLE 1

DESCRIPTIONS OF THE APQ SCALE

Number	Name	Abbreviated Name	Scale Range	Description
1	Commitment	CM	1 - 5	An average composite of 3 items which measure the average length of time per visit, the number of visits per week and the absolute number of visits to the field assignment by the student.
2	Instructional Activity	IA	1 - 5	An average composite of 12 items which measure the frequency of the student's direct involvement in a variety of actual teaching activities requiring contact with children.
3	Breadth-Depth of Involvement	BD	1 - 5	An average composite of 13 items which measure the breadth and frequency of the student's involvement in activities such as attending PTA meetings, school board meetings, visiting, observing and talking with other teachers, seeking out, meeting, talking with a variety of people in the school and school community and seeking out and examining instructional materials, special programs, etc.
4	Application of Theoretic Knowledge	ATK	1 - 5	An average composite of 9 items designed to measure the frequency and degree to which the student attempts to use the theories he encounters in college classrooms and readings in an interpretative and applicative way in practical field situations.
5	Routine Tasks	RT	1 - 5	An average composite of 7 items which indicate the degree to which a student was a relatively passive observer or was simply involved in "low level" clerical-maintenance tasks such as washing black boards, general supervision of playground activities, straightening up the room, etc.
6	Use of Methods Specialists	UMS	1 - 5	A single item which asked students to report the frequency with which they attempted to solve teaching problems encountered in the field by appealing to a university methods specialist.
7	Percent Time Preparing for Field Work	PFW	1 - 5	A single item which asks students to report the percentage of total class preparation time they expended in preparing for field work. The categories were 1 = 0-10%, 2 = 11-30%, 3 = 31-50%, 4 = 51-70%, 5 = 71-90%.

TABLE 1 (CONT'D)

Number	Name	Abbreviated Name	Scale Range	Description
8	Preference For Opposite Section	POS	1 - 5	A single item which indicates liking of the program he was in by asking him if he would have preferred to be enrolled in the opposite section (e.g. experimental or regular) as was the case for the individual. This item was reverse scaled.
9	Recommend Expansion Experimental Program	REEP	1 - 5	A single item which indicates perceived value of the experimental program by asking all students (E groups and R groups) if they thought the experimental program should be expanded.
10	Recommend Experimental Program to Friends	REPF	1 - 5	A single item which indicates perceived value of the experimental program by asking all students (E groups and R groups) if they would recommend the experimental program to friends.
11	Recommend Regular Program to Friends	RRPF	1 - 5	A single item which indicates perceived value of the regular program by asking all students (E groups and R groups) if they would recommend the regular program to friends.

TABLE 2

DESIGN OF TWO STUDIES COMPARING EXPERIMENTAL VS. REGULAR PROGRAMS ON APQ VARIABLES

Study	Groups	n	Amount of Treatment	Null Hypotheses
I E_1- R_1	E_1	33	2 Semesters Experimental Program	$\mu_{E_1} - \mu_{R_1} = 0$ for all eleven variables in Table I*
	R_1	86	2 Semesters Regular Program	
II E_2- R_2	E_2	83	1 Semester Experimental Program	$\mu_{E_2} - \mu_{R_2} = 0$ for all eleven variables in Table I*
	R_2	99	1 Semester Regular Program	

* Scores on variables number 8 and 11 were hypothesized as being of greater magnitude for R groups than for E groups. Scores on all other variables in Table 1 were hypothesized as being greater for E groups than for R groups.

TABLE 3

COMPARISON OF EXPERIMENTAL (E_1) VERSUS REGULAR (R_1) GROUPS ON APQ VARIABLES

No.	Scale (Index)	Means		Standard Deviations		Univariate* F Ratio	Significance Level p <
		E_1	R_1	E_1	R_1		
1	CM	3.46	2.25	.80	.98	40.06	.0001
2	IA	3.15	2.11	.75	.98	29.88	.0001
3	BD	2.60	1.78	.67	.84	25.35	.0001
4	ATK	3.48	2.33	.94	1.06	29.58	.0001
5	RT	3.60	2.76	.86	1.12	15.10	.0002
6	UMS	2.48	1.21	1.25	.98	34.27	.0001
7	PFW	4.00	1.90	1.27	1.32	61.78	.0001
8	POS	1.33	2.90	1.05	1.66	25.27	.0001
9	REEP	4.06	2.72	1.64	1.99	11.89	.0008
10	REPF	4.45	2.29	1.33	1.92	35.31	.0001
11	RRPF	1.70	2.64	1.36	1.58	9.15	.0031

* A multivariate analysis of variance was carried out for all eleven variables prior to the univariate analysis. The multivariate F ratio for a test of equality of E and R across all eleven variables was calculated to be 16.59 with 11 and 107 dif. ($p < .0001$).

TABLE 4

COMPARISON OF EXPERIMENTAL (E_2) VERSUS REGULAR (R_2) GROUPS ON APQ VARIABLES

No.	Scale (Index)	Means		Standard Deviations		Univariate* F Ratio	Significance Level p <
		E_2	R_2	E_2	R_2		
1	CM	3.32	1.99	.64	.77	156.57	.0001
2	IA	2.87	1.92	.85	1.00	46.38	.0001
3	BD	1.94	1.64	.53	.80	8.28	.0045
4	ATK	2.98	2.19	.84	.99	32.94	.0001
5	RT	3.35	2.75	.71	1.12	18.04	.0001
6	UMS	1.65	1.13	.87	.91	15.20	.0002
7	PFW	4.10	2.42	1.12	1.38	78.51	.0001
8	POS	1.30	2.62	.98	1.59	42.72	.0001
9	REEP	3.65	3.27	1.86	1.60	2.17	.1424
10	REPR	3.92	3.30	1.68	1.33	7.52	.0067
11	RRPF	2.15	2.94	1.53	1.19	14.97	.0002

* A multivariate analysis of variance was carried out for all eleven variables prior to the univariate analysis. The multivariate F ratio for a test of equality of E and R across all eleven variables was calculated to be 34.75 with 11 and 170 d.f. ($p < .0001$).

Exhibit D is the actual listing of appropriate activities provided students.

Principles.

10. If you want to evaluate a program or a component of a program, you first need to develop some operational statements of performances or outcomes. In this case these turned out to be the categories, range and types of field activities engaged in by "successful" students.

11. When generating such basic operational performance descriptions: a) think up some broad categories of activities which encompass the broad objectives for the program, b) translate these into even more specific "point-to-ables" or operational descriptions. This is exactly the procedure outlined in the first section of these materials.

12. In constructing both the basic role descriptions or broad categories of performance as well as the specific performance indices, direct observation of successful instances can add much to your logical conceptualizations in both areas. In this case many of the particular indices and some of the major categories of activity in the field experience were identified from interviewing individual highly successful field experience students, reading their logs and talking with their instructors and field supervisors.

13. After you have developed such indices, try them out to see if they discriminate between other highly successful and less highly successful instances of the desired outcome. Sometimes this is called discriminant validity. (See Exhibit C.)

Exhibit D

Appropriate Activities for Teacher Aides or Tutors
Engaged in Field Experiences

As you begin your initial experience as a teacher aide or tutor in a classroom in a public school or some other agency there are many opportunities for you to take the initiative to insure that you will make a positive contribution to the ongoing instruction. If you do actively seek to engage in many teaching related activities you will not only help the teacher and pupils you are assigned to, you will also help yourself to learn more about teaching and the ideas and concepts encountered in your university education courses. You will also feel that the time you have spent in the classroom has been valuable and worthwhile.

One common error of many students who begin work as student aides or tutors is to think the only thing they can do to gain relevant experience is to teach an entire class an entire lesson. Most student aides and tutors do not have the opportunity to do such full time teaching. This is because usually they are not ready to do so and because the teacher has an obligation to do most of the group teaching. Yet there is absolutely no reason for a student aide or tutor to sit for several weeks in a classroom as a passive observer.

There are scores of activities and tasks in which you can engage which are related to many aspects of teaching and learning and which illustrate how knowledge gained in education courses applies to teaching. If you never do anything but observe the teacher you are not being active enough in seeking to make your field experience worthwhile.

To help you in the task of selecting appropriate activities in your field experience a list of forty-three different types of tasks has been prepared. This list is based upon observing what good student aides and tutors actually do. Examine this list. Show it to your teacher after your first day or two in his or her classroom. Explore what activities your teacher feels are appropriate for you. Plan to do some of them. Don't be reluctant to suggest activities you would like to do. Teachers are very busy and most of them will appreciate your taking the initiative and asking if you can help out in certain ways. It will save them time and increase their respect for your perception and competence. Remember, however, to be respectful and polite in making your requests. If your teacher does not feel you are ready to do a particular activity don't insist. Rather, ask him what other activity you could substitute. Let him know you want to be and are expected to be active, not simply a passive observer of his teaching activity.

One opportunity is always present in any classroom. There are always some students absent who miss tests, miss work and instruction which must be made up, or who fail to understand something taught in class when the rest of the class has learned that something. Such situations exist daily. Offer your services to the teacher to help these students. Offer to give them special private tutoring or to administer and score quizzes or tests missed, call parents of children who are ill and explain assignments, etc.

The logs you keep of your field experiences should reflect your involvement in a wide range of the activities on the attached list. Later in the semester both you and your teacher will be asked to indicate how active you have been in performing such tasks. Your grade on your field work will be largely determined from this information. But much more important, your feelings of competence and success in progress toward becoming a teacher will be directly related to how much you have tried to experience and the opportunities you have created for yourself to learn and excel in important aspects of teaching.

Appropriate Tasks for University Student Aides and Tutors

1. Teach an entire class of children a portion of a lesson.
2. Teach an entire class of children an entire lesson.
3. Teach one or two or small groups of children an entire lesson.
4. Teach small groups of children portions of lessons or specific skills or competencies.
5. Proctor student performance on tasks assigned by the teacher during work periods, spotting problems and correcting student performance as needed.
6. Work with individual students intensively over a period of time to instruct them in specific skills or competencies.

7. Examine student papers and materials to see what they are doing, how they think and how they might be taught particular concepts or skills.

8. Grade and correct a few student papers for the teacher.

9. Listen to individual students as they explain how they did things, what they didn't understand, what they liked, etc.

10. Listen or watch one child perform (read, write, talk, play, etc.) to better understand him and how to teach him.

11. Plan on your own brief lessons, games, learning activities, stories, etc. for use with some small group of children or child.

12. Cooperatively plan with your teacher lessons and activities for individual children or groups of children.

13. Construct a regular lesson plan for the entire class with your teacher or for some portion of the class.

14. Administer quizzes or tests to students.

15. Construct quizzes or portions of tests for students.

16. Tutor individual students who had trouble with certain lessons, tasks and activities, or who have been absent.

17. Observe the teacher conduct lessons, tutor children, supervise play periods, conduct a parent conference, etc.

18. Supervise students during play periods, sports activities or games.

19. Plan and/or supervise student field trips, outings or special events.

20. Take one or more children on a special trip or assist them with a special project.

21. Talk at the school with parents of a student.

22. Observe or participate in a parent-teacher conference.

23. Attend a PTA, School Board, Teachers' meeting, school play, or other similar community-school event after school.

24. Talk with teachers in the lounge, lunch room or in other places at school.

25. Observe teachers and students in classrooms other than the teacher you were assigned to and in different areas of content and specialization.

26. Meet with special service personnel in the school such as librarians, school nurses, guidance counselors, social workers, speech therapists, etc. and observe and discuss their roles.

27. Talk with special service school personnel about particular student problems and the services available to deal with them.

28. Examine the school records of students you are working with.

29. Talk with or meet other school personnel such as secretaries or janitors. Observe and ask about their work and the contact they have with students and teachers.

30. Engage in dialogues with your teacher or other teachers about learning theories, philosophies of education, social class problems, values, views of development, etc.

31. Observe other student aides, tutors or student teachers teaching or working with children. Talk with them about different theories, values, ideas and problems.

32. Work with or talk to other aides, tutors, or student teachers in planning or carrying out your own teaching or tutoring activities.

33. Help the teacher you were assigned to by washing boards, straightening up the room, cleaning out closets, entering grades in the record book, taking attendance, making seating charts, preparing bulletin boards, etc.

34. Examine student learning materials (films, books, library books, posters, etc.) used in the school and available in the room, library or instructional materials center.

35. Prepare a detailed case study on one particular child toward better understanding him and/or planning for his instruction. Write a study which would be short but useful to other teachers.

36. Observe one child over a period of time to determine how to modify his behavior in a certain way to improve his conduct or ability to learn.

37. Develop and apply a behavior modification procedure to improve some aspect of a child's behavior or learning activity.

38. Try out some new instructional materials, techniques, procedures, or games you heard of in 202 or 301 with small groups of students.

39. Observe children and teachers toward identifying specific instances of theory learned in 202-301 classes, e.g. Piaget's notion of reversible thought, authoritarian versus democratic forms of control, instances of essentialist versus progressive educational philosophy.

40. Meet with other instructors from the university for special sessions in learning how to teach children with problems in reading, mathematics, speech, etc.

41. Report, record and discuss interesting or problematic instances in your field experience to your 202-301 classes and instructors.

42. Relate, record and report your field experiences to ideas, theories and knowledge learned in 202 and 301 classes.

43. Help your teacher prepare special materials for a given lesson or unit. Help locate information about a given topic, prepare bibliographies or collect needed information for a given unit or topic your teacher intends to teach in the near future.

3. & 4. Forming and Applying Criteria by Which to Plan and Evaluate Individual Student's Field Activity and Enhancing Communications Among All Groups

The research discussed in the previous section did much to identify relevant types of field experiences. After learning about the results of the study and seeing a copy of the list of appropriate activities for field experience, all instructors and the majority of students requested copies of the listing. The list (Exhibit D in the preceding section) was given to all students and instructors. It was also given to the administrative staff of the college office of "Field and Laboratory Experiences" and the administrative staff of the regional school district who assign university teacher aides to teachers.

Each student was also instructed to hand carry this list to the classroom where he or she was assigned and to negotiate with the supervising teacher the particular type and range of activities he or she was to engage in during the field experience. The list was to be used as an appropriate source of ideas. It was not intended that each student would engage in all activities or that no additional activities could be proposed.

After the first meeting with the supervising teacher the student was required to write a prospectus in which the goals for the field experience, which had been mutually agreed to and individually arranged, would be listed. The prospectus was then turned in to the campus instructor. The campus instructor then used this statement of individual goals and purpose to evaluate subsequent student logs of the field experience.

Additional criteria were also established concerning how instructors would evaluate the student's logs of his field experience. A form letter was also sent to each supervising teacher thanking him or her for participating in the program, conveying some basic notion of the importance of the field program, explaining that the student should negotiate with him or her the particular field activities using the listing, explaining that the student would be evaluated by the teacher and finally giving the teacher the campus instructor's name, address and telephone number as well as the name and telephone number of the campus administrator in charge of the program.

A form for use by supervising teachers to evaluate the university student assigned to them was also prepared. It is based on the range and type of activities suggested for the program and other criteria established for the field experience. It also makes provision for the teacher to indicate whether or not the student served in a useful instructional capacity and whether or not the teacher would like to have another university student aide in the future.

The basic criteria for evaluating the field experience are presented in Exhibit E. This information was distributed to all instructors and students. The explanatory form letter sent to all teachers is included as Exhibit F. The evaluation form used by all teachers is presented as Exhibit G. The use of these procedures effectively overcame the problems encountered in planning and evaluating the field experience component of the program.

Principles

14. Don't try to impose standard criteria and procedures upon diverse groups of people involved in operating a program. Rather demonstrate

and explain how a set of standard criteria and procedures can help them do a better job, lessen their work load and generally improve their situation. At this point the client group (in this case the instructors, students and supervising teachers) will come to you requesting to use the innovation (in this case the categories and operational listing of appropriate field experiences). This is sometimes known as the rational-empirical approach to change.

15. Communicate clearly to all parties involved, not only the rationale for an activity, but the specific procedures, requirements and criteria by which the activity will be implemented and evaluated. In this case this involved developing the supporting services and mechanisms which helped place students in appropriate field experiences (described in the previous section) as well as developing the field project requirements and criteria for students (Exhibit E), the form letter to teachers (Exhibit F), the procedure by which each student and supervising teacher would plan and outline a particular set of field experiences which would be prepared as a prospectus for the instructor to guide his evaluation of individual student logs, and the evaluation form (Exhibit G) to be completed by the teacher at the conclusion of the student's field experience.

Exhibit E

FIELD PROJECT REQUIREMENTS

As part of your EDP 202 requirements, you are required to engage in a field experience in a classroom or other type of educational setting. The minimum duration acceptable is a 2-hour involvement one day a week for a period of six weeks.

You will receive a hand-out describing various activities you may be involved in as part of your field experience.

During your field experience you are required to:

1. Write a prospectus after your first visit to the school where you have been assigned and after you have met with your supervising teacher and reviewed the list of appropriate activities. The prospectus should contain:

   a. A brief description of the school, agency or group with which you will work.

   b. A list of the goals and activities which you and the teacher have planned for the field experience.

2. You are also required to prepare a log for each visit. A brief version of these criteria appears below.

3. Finally at the end of your field experience, you are required to write a summary evaluating how well your goals were met.

Generally it is best if your logs are prepared on separate loose leaf notebook paper or typed on regular typing paper. This allows you to hand them in to your instructor every week and allows the instructor to read them promptly and return them to you. A bound or spiral ring notebook is less desirable because you are not able to continue writing the log while your instructor has your entire notebook.

CRITERIA FOR FIELD PROJECT EVALUATION

Field projects will be evaluated on:

a. The goals set forth in the prospectus.

b. The adequacy of the project logs.

c. The quality of the written final evaluation of the field experience by the student.

d. The supervising teacher's evaluation of the student on the standard departmental form.

Evaluation of the field project logs is based upon the extent to which the log demonstrates the following criteria:

1. The commitment of the student to teaching and the proposed goals and activities stated in the prospectus.

2. The degree to which the student has engaged in instructional activities, from among those listed on "Appropriate Field Experience."

3. The breadth and depth of involvement of the student in learning about and participating in the school generally.

4. The degree to which the student applies theoretic knowledge of human development and learning acquired in the EDP 202 course to the classroom situations he reports in his logs.

5. The degree the student assists the teacher with routine classroom tasks and necessary work related to instruction.

6. Degree to which the student regularly attends and meets his field experience obligations established in his initial meeting with his teacher and recorded in his prospectus.

Exhibit F

M E M O R A N D U M

TO: Cooperating Teachers

RE: Teacher Evaluation Forms

I would like to express my appreciation as well as that of the department for your willingness to participate as a cooperating teacher in the Educational Psychology 202 Field Experience Program. The course evaluation from last semester clearly indicates that most students feel this part of the course was extremely valuable to them. And I think those instructors who teach in the program would certainly concur. Most teachers also feel that the aides provide them with valuable assistance.

As your student aide has probably already indicated to you, the requirements for the field experience are as follows:

1) a prospectus which describes the projects and activities to be undertaken during the field experience. They should be agreed upon by you and your student aide.

2) a set of logs which serve to provide the instructor with information about how the field experience is going on a day by day basis.

3) a summary statement providing the instructor indication of how the student perceives the value of the field experience and what he has learned.

4) a teacher evaluation form which we will send to you and ask that you fill out and return to us in a stamped self-addressed envelope which we will provide you with. This will occur at the end of the student's field experience with you. Your student will give you the form and envelope. Your rating will be used in large part to calculate the student's grade for his field experience requirement.

Should you have any questions regarding the field experience, please do not hesitate to contact me or the coordinator of the EDP 202 program. We are always delighted to discuss any problem or concern. You possibly may wish to consult the "Appropriate Activities for Teacher Aides or Tutors Engaged in Field Experiences," but do not feel restricted by the suggestions in that paper.

Once again, please accept our sincere thanks and appreciation for your important contribution to our undergraduate teacher preparation program.

_____

Instructor, phone:

Coordinator's office phone:

Exhibit G

TO THE COOPERATING TEACHER:

Each semester several hundred students enrolled in the teacher education program at the University of Kentucky are placed in the public schools or other private agencies as teacher-aides. The primary purpose of these placements is to make first-hand experience a vital part of our teacher education program. We are grateful for your assistance in this program. It is our expectation that the teacher aides will provide a positive contribution to you their sponsoring teachers and your classrooms.

The checklist is an attempt to assess the nature and extent of teacher-aide classroom participation in order to evaluate its contribution to the training of the future teacher.

As you rate the student on each of the categories which follow please remember we do not expect a given student to engage in all of these activities. We do, however, expect the student to engage in a wide range of these activities and to engage in some of them frequently.

The results of your rating of the student will be shared with the student's instructor who will use the information along with student reports to assign a grade for the field experience. If you wish you may show your rating to the student and discuss it with him or his university instructor may do so. If you wish your rating to remain confidential the instructor will share with the student only the overall rating you list on item 21.

NAME OF STUDENT: _____

ASSISTED AT: _____

FROM: _____ TO: _____ (dates)

NUMBER OF TIMES STUDENT PRESENT IN YOUR CLASS: _____

TOTAL CLASSROOM HOURS: _____ (Approximately)

PLEASE CHECK EACH OF THE FOLLOWING:

I have met with the student and shared my rating of his/her performance with him/her.	YES	NO
I grant the university instructor permission to share my entire rating of the student's performance with him/her.	YES	NO
I wish my rating of the student to remain confidential and understand that the instructor will inform the student only of my overall rating assigned on item 21.	YES	NO

DATE: _____ PARTICIPATING TEACHER: _____
Signature

RATE THE TEACHER AIDE ON EACH OF THE ITEMS.

PLEASE CIRCLE ONE NUMBER FOR EACH ITEM ACCORDING TO THE FOLLOWING KEY:
1 = Frequently 2 = Occasionally 3 = Seldom 4 = Never

1.	Took responsibility for planning and teaching an entire lesson to one or a small number of students.	1 2 3 4
2.	Assisted you in teaching some portion of a lesson.	1 2 3 4
3.	Worked with individual students or small groups having special problems.	1 2 3 4
4.	Cooperated with you in the planning and preparation of lesson plans and/or other learning activities.	1 2 3 4
5.	Assisted in the construction, administration, and/or grading of tests.	1 2 3 4
6.	Was a careful observer of student behavior.	1 2 3 4
7.	Demonstrated a willingness to listen to and understand students.	1 2 3 4
8.	Displayed a willingness to learn from you, other teachers and staff.	1 2 3 4
9.	Helped plan and supervise activities such as play periods, sports activities, outings and/or field trips.	1 2 3 4
10.	Attended or participated in activities such as parent-teacher conferences, faculty meetings, P.T.A. meetings, school board meetings and/or other community-school activities.	1 2 3 4
11.	Assisted in routine matters such as helping wash boards, taking attendance, straightening the room, preparing bulletin boards, etc.	1 2 3 4
12.	Made an attempt to become familiar with many aspects of the school program by visiting other classes, talking with other teachers and staff, exploring the library and other school services.	1 2 3 4
13.	Attempted to become familiar with various learning materials used in the classroom and available in the school.	1 2 3 4
14.	In dealing with you and your students, gave evidence of basic knowledge of child development, learning theory, teaching methods, age-level characteristics and educational philosophy.	1 2 3 4
15.	Attempted to gain or apply knowledge through the careful observation and study of one particular child, group of children or a specific classroom problem.	1 2 3 4

PLEASE MARK THE FOLLOWING ITEMS EITHER YES OR NO:

16.	Has this teacher-aide regularly fulfilled his/her commitments to you? (e.g., appeared on time, prepared materials and activities as previously agreed upon, etc.)	YES NO

17. Was the teacher-aide dependable? (Did he/she accept responsibility, follow through on delegated tasks, etc.) YES NO

18. Was the dress, appearance and conduct of the teacher-aide acceptable? YES NO

19. Was it helpful for you to have this teacher-aide participate in your class? YES NO

20. Would you be willing to work with a university student teacher-aide in the future? YES NO

21. HOW WOULD YOU RATE THE OVERALL EFFECTIVENESS OF THIS TEACHER-AIDE?

Excellent	Above Average	Average	Needs Improvement	Poor
1	2	3	4	5

22. IF YOU WISH - you may provide other information which you feel would be helpful in evaluation of the teacher-aide.

5. Collecting Data About Program Effectiveness and Providing Feedback to All Groups

To insure continued development of the field experience component of the program and continued interest and commitment to the program, it was necessary to collect data on program effectiveness and share this with all parties involved.

Data on students' perception of the value and worth of the field experience as well as other components and procedures of the course were collected at the end of each semester. A student evaluation form in addition to the standard "evaluation of teaching" form used by the college was prepared. Items on the form were prepared to evaluate student perception of the worth of each component of the program. Data on perceived value of the field experience were collected in relation to 1) other components of the course and 2) its contribution toward the individual's professional development as a teacher. Other data concerning the procedures actually used by students to obtain field experience assignments, the types of agencies in which they worked and the types and duration of activities they engaged in were also collected.

The other primary data source was the evaluation forms completed by each supervising teacher on each university student following the field experience. The amount, range and types of field experiences were tabulated from these data as well as the names, types and numbers of agencies used by students as field experience settings. In addition, teachers were asked to indicate how valuable the university teacher aide had been to them in their instructional activity and whether or not they would like other university aides in the future.

All data were collected on standard forms and machine processed. Data were organized into charts and tables and presented to various groups. These included course instructors, incoming students in subsequent semesters, administrators and other faculty members in the college as well as administrators from the regional school district who assign university students to work with specific teachers. This feedback of results proved very useful in winning continued support for the program. It proved particularly useful in changing the perceptions of chief administrators in regional schools who still harbored the idea, based on the earlier problems with the program, that teachers in the schools did not want university students as aides and that they were more trouble than help. Exhibit I, which is based on data collected from the teacher evaluation form, provided indisputable evidence that teachers did value and want to continue the program.

The collection, organization and presentation of such information made it possible for further constructive criticism, planned change and improved practices in program operation based upon accurate information. In short, it led to more rational program planning, management and decision making.

Exhibit H below is the actual form used to collect data about students' perception and valuation of program components, procedures and activities including the field experience. The form used to collect data about the amount, range, frequency and type of student field activities is the teacher evaluation form, Exhibit G in the previous section. This form also provided information about the teachers' valuation of the field experience program (see items 19 and 20).

Exhibits I and J are examples of some of the information about program effectiveness gleaned from the above sources which was shared with instructors, students and administrators in order to provide them with feedback and render them more informed decision makers and planners. Other modes of presentation included displays, short verbal presentations, informal small group dialogues and written formal reports. Only a few of the graphic displays of results are included here as illustrative examples of the role of such information in continued program operation.

Principles

16. If you want the people involved in a program to continue working with the program adaptively and productively, it is necessary to provide them with accurate feedback about program functioning and achievement. This is particularly true if you want them to continue making informed rational plans and decisions toward stated goals. In the absence of such data people tend to make major decisions and evaluations on very inadequate samples of information, e.g., the comments of three students, the positive or negative feelings of one or two teachers or administrators or simply their own hunches or biases. For example, the administrators in the regional schools still strongly believed that teachers did not value and want to continue the program when it was obvious that for more than 97% of the teachers the reverse was true. The administrators gained their information two or three years earlier, primarily from school principals, and had no newer information as a reason to change their opinion.

17. Providing information about the program to all interested groups not only makes it possible for all parties to be more rational and informed in their plans and decisions, it also helps establish a climate of openness, mutual trust, respect and cooperation. Withholding of information intentionally or through carelessness is often viewed with suspicion and anxiety. People don't like to have data compiled about them and <u>not</u> have access to the results and <u>not</u> be a party to subsequent decisions which involve them.

18. Disseminating such information to all parties involved insures that many new ideas, plans and solutions will emerge to present and future limitations and problems. The diverse groups of people actually involved and working in such programs have the experience, insight and practical knowledge needed to solve such problems. What is needed, in addition, is a key facilitator who coordinates and orchestrates talents, ideas, problem identification data and solutions. One or two key persons, no matter how expert, cannot hope to produce the range of creative solutions and approaches to problems of which the collective membership is capable. In addition, one key person's ideas repeatedly imposed forcefully on groups involved in such a program clearly conveys the idea that the administrator feels the groups he works with are basically incompetent or impotent. Thus his policies, no matter how rational and worthy, remain arrogant and are apt to be perceived as his and not the goals and ambitions of the individuals and groups he works with. In such situations adversary relationships usually develop between the administrator and those he administers. Defensive behavior replaces mutual trust, respect and cooperation. Capability for healthy and continued self-renewal of the program and its goals is lost.

STUDENT EVALUATION OF TEACHING

Exhibit H

The following items are intended to provide information to your instructor and others in the College regarding the improvement of instruction. Your responses will constitute a portion of the basis upon which this instructor will be evaluated by his Department Chairman and Dean.

A six-digit number identifying this class will be given you by your professor. The six columns into which you must enter it are in the upper right hand quadrant of the answer sheet and are numbered one through six. Enter the number and be sure to blacken the appropriate block beneath each digit, with a soft lead pencil. Mark your ratings on the answer sheet, not on this form. In addition, space on this form is provided with each section for your comments about the section. You may also use the back of this form if additional room is needed.

A. Each of these statements describes a basic component of teaching. Although the faculty member may vary on the individual descripters listed below, make an overall, general rating of each component. Then, reflect any particulars in the comment section.

		Low Score 1	2	3	4	High Score 5	$\bar{X}$	SD	Comments
1. Has command of the subject, presents material in an analytic way, contrasts points of view, discusses current developments, and relates topics to other areas of knowledge.	f	1	8	33	58	71	4.1	0.92	
2. Makes himself clear, states objectives, summarizes major points, presents material in an organized manner, and provides emphasis.	f	2	15	36	46	72	4.0	1.05	
3. Is sensitive to the response of the class, encourages student participation, and welcomes questions and discussion.	f	0	2	6	48	115	4.6	0.62	
4. Is available to and friendly toward students, is interested in students as individuals, is himself respected as a person and is valued for advice not directly related to the course.	f	0	2	13	45	111	4.5	0.69	
5. Enjoys teaching, is enthusiastic about his subject, makes the course exciting, and has self-confidence.	f	2	8	33	62	65	4.1	0.93	

B. How do you rate the quality of the following aspects of this course?

	Low Score				High Score	Doesn't apply or don't know	$\bar{X}$	S.D.	Frequencies 1	2	3	4	5
6. textbook(s)	1	2	3	4	5	blank	3.7	1.13	8	17	44	52	49
7. supplementary readings	1	2	3	4	5	blank	2.9	1.00	14	58	60	45	6
8. lectures	1	2	3	4	5	blank	3.5	1.01	4	25	57	62	28
9. class discussions	1	2	3	4	5	blank	3.6	1.05	7	16	54	58	36
10. laboratories	1	2	3	4	5	blank	3.4	1.29	9	11	30	16	26
11. outside-of-class assignments or problems	1	2	3	4	5	blank	2.9	1.13	23	32	62	35	13
12. examinations	1	2	3	4	5	blank	2.7	1.06	25	44	58	37	5
13. overall value of course	1	2	3	4	5	blank	3.4	1.05	9	24	48	68	21

C. Additional information from students in the course.

	f	
14. Was class size appropriate for the method of conducting the class?	6	1. No, class too large.
	155	2. Yes, usually.
	3	3. No, class too small.
15. What grade do you expect to receive in this course?	2	1. Fail
	3	2. D (If none of
	6	3. C these, leave
	71	4. B blank.)
	88	5. A
16. For my background and ability, the level of difficulty of this course was:	8	1. Very elementary.
	32	2. Somewhat elementary.
	119	3. About right.
	30	4. Somewhat difficult.
	2	5. Very difficult.
17. For me, the pace at which the instructor covered the material was:	1	1. Very slow.
	22	2. Somewhat slow.
	127	3. Just about right.
	18	4. Somewhat fast.
	2	5. Very fast.
18. The work load for this course in relation to other courses of equal credit was:	1	1. Much lighter.
	6	2. Lighter.
	31	3. About the same
	87	4. Heavier.
	45	5. Much heavier.
19. What is your enrollment status?	125	1. Undergrad education
	25	2. A&S student taking education courses.
	13	3. Undergrad other.
	1	4. Graduate education.
	7	5. Graduate other.
20. Which one of the following best describes this course for you?	135	1. Major requirement or elective within major field.
	4	2. Minor requirement or required elective outside major field.
	22	3. College requirement but not part of my major or minor field.
	3	4. Elective not required in any way.
	7	5. Other.
21. Sex:	117	1. Female
	51	2. Male
22. Are you taking this course:	170	1. On campus?
	1	2. Off campus - extension?

Exhibit H (Cont'd)

COURSE EVALUATION
PART II

In trying to develop a program which will better serve the needs and interests of a wide variety of students we need information about student characteristics, choices and preferences. For this reason we are asking you to answer the following questions. Please continue the answers to these questions on the answer sheet you have been using in your evaluation of the instructor and course. Your responses to both the previous form and the questions which follow will be examined and compared with your achievement scores on course examinations, your selection of mini courses and self study units, and standardized test results from examinations you took when you entered the university. To do this we will need your student number.

Your instructor will not see your rating of him. The results of these forms will not be available to instructors until after the semester is completed. Even then your instructor will never have available to him the identity of individual students. Your student number will be used only to match your responses to questions on this form with other information about you including your choice of self study units, EDP 202 core unit exam scores, and standardized test results.

If you feel very strongly that you do not want to include your student identification number you may omit it. No one has the right to make you list your number. However, we hope you will consent to include your number since it will allow us to plan toward building a better program.

Would you at this time please write in and then blacken in your student number in the space provided on the answer sheet.

In general rate each of the following relative to their value and contribution to your development as a professional educator:

		Low				High	$\bar{X}$	SD
23. Mini Courses		1	2	3	4	5		
	f	22	34	41	38	36	3.2	1.32
24. Self Study Units		1	2	3	4	5		
	f	28	65	48	27	4	2.5	1.02
25. Applicational Objectives		1	2	3	4	5		
	f	45	50	41	34	2	2.4	1.11
26. Field Experiences		1	2	3	4	5		
	f	4	0	16	43	106	4.5	0.85
27. Core Units		1	2	3	4	5		
	f	6	16	56	74	20	3.5	0.94

Please rate the following aspects of the testing program:

		Low				High		
28. Quality and fairness of core unit exams		1	2	3	4	5		
	f	17	40	59	45	11	3.0	1.07
29. Quality and fairness of self study unit exams		1	2	3	4	5		
	f	21	48	55	32	15	2.8	1.14

		Yes	No	$\bar{X}$	SD
30.	In the future would you prefer a midterm and final rather than individual unit exams?	1 f 13	2 159	1.9	0.27
31.	In the future would you prefer that your instructor make out his own exams rather than use the departmental exams?	1 f 112	2 58	1.4	0.56
32.	Would you prefer in the future to have essay examinations prepared by your instructor and included on each quiz rather than have applicational objectives?	1 f 90	2 81	1.5	0.50
33.	In the future would you prefer <u>all</u> testing be completed in the test center?	1 f 12	2 159	1.9	0.27

Please comment on your comment sheet if you wish.

	Not useful				Very useful	
34. How useful were the overviews and objectives provided in the core units and self study units?	1	2	3	4	5	$\bar{X}$ 3.3
	f 15	20	55	54	27	SD 1.14

The course consisted of the following components

1) Core Units
2) Applicational Objectives
3) Self Study Units
4) Field Project
5) Mini Courses

35. Indicate the single <u>most</u> valuable component of the course

	1	2	3	4	5
f	34	3	4	122	9

36. Indicate the single <u>second most</u> valuable component of the course

	1	2	3	4	5
f	64	17	7	29	52

37. Indicate the single <u>least</u> valuable component of the course

	1	2	3	4	5
f	4	69	56	3	35

38. Indicate the <u>second least</u> valuable component of the course

	1	2	3	4	5
f	17	48	59	5	38

39. Do you feel the relative contribution of each component of the course toward the final grade was appropriate?

	1) Yes	2) No	$\bar{X}$	SD
f	100	60	1.4	0.50

If no, list suggestions for other grading procedures on your comment sheet.

40. Where are you planning to teach?

f		
44	1)	elementary school
2	2)	middle school
79	3)	junior high or high school
28	4)	special education setting
14	5)	not planning to teach

41. How were you placed in your field project?

f		
55	1)	by the University
90	2)	by my own efforts
20	3)	sought a placement but was not placed at all
0	4)	didn't seek a placement and was not placed

42. Please rate the entire EDP 202 course operation and requirements by selecting <u>one</u> of the following items:

Course procedures and requirements are:			$\bar{X}$	SD
f			2.7	1.13
23	1)	excessively legalistic and restrictive		
62	2)	somewhat restrictive		
38	3)	a proper balance of restrictions and options		
32	4)	somewhat flexible		
11	5)	very flexible allowing a student many choices and options		

43. How do you feel about yourself and your future as a teacher?

Bored						Interested		
Unexcited	1	2	3	4	5	Excited	$\bar{X}$	SD
Unenthused	3	8	24	54	76	Enthusiastic	4.2	0.97

44. Which number best characterizes why you are currently enrolled in EDP 202?

Because I						Because I		
<u>have</u> to be	1	2	3	4	5	<u>want</u> to be	$\bar{X}$	SD
	45	22	46	30	21		2.8	1.37

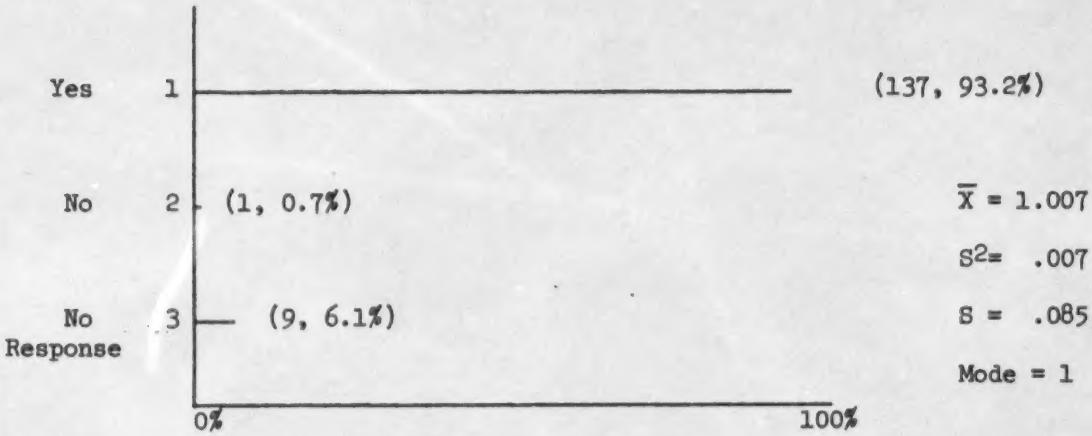
Exhibit I

Supervising Teachers' Valuation of
the Field Experience Program

Item 19:

Was it helpful for you to have this teacher-aide participate in your class?

N = 138, Missing data = 9



Item 20:

Would you be willing to work with a university teacher-aide in the future?

N = 144, Missing data = 3

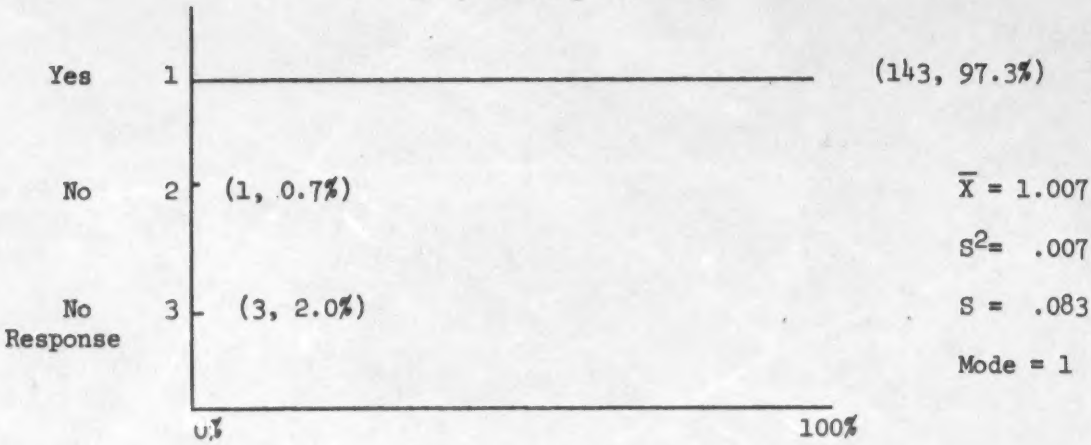


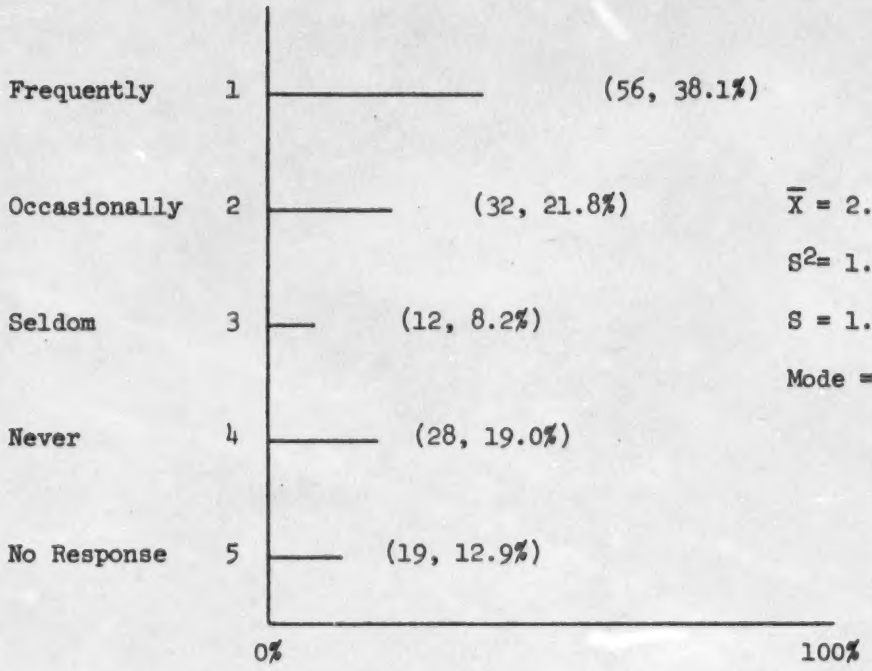
Exhibit J

Representative Types and Frequencies of Student Field Experiences Reported by Teachers

Item 1:

Took responsibility for planning and teaching an entire lesson to one or a small number of students.

N = 128, Missing data = 19



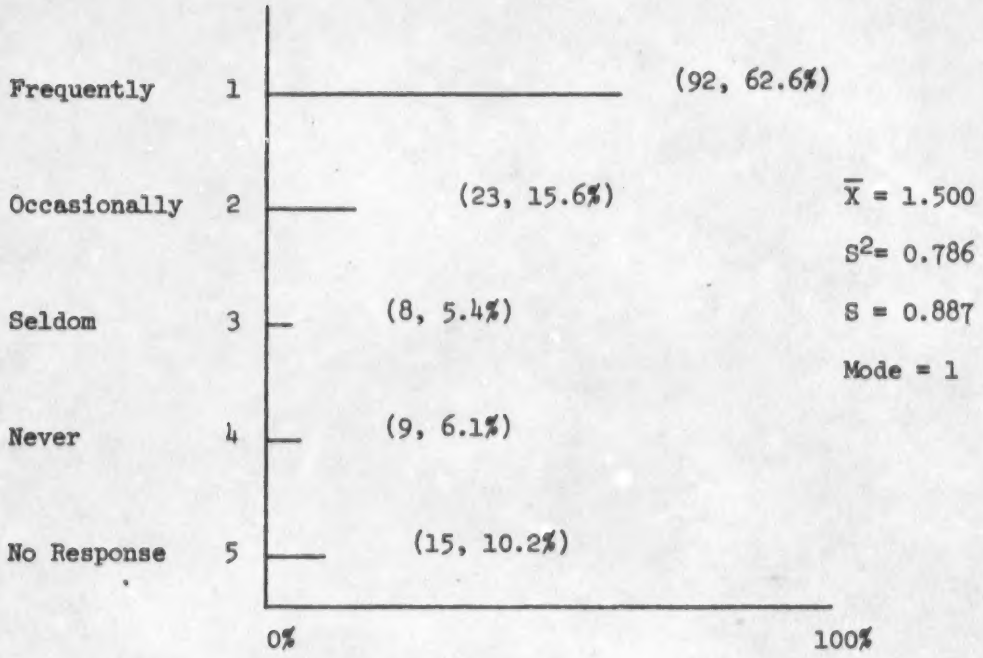
Frequency and Percent

Exhibit J cont.

Item 3:

Worked with individual students or small groups having special problems.

N = 132, Missing data = 15



Frequency and Percent

Exhibit J cont.

Item 7:

Demonstrated a willingness to listen to and understand students.

N = 141, Missing data = 6

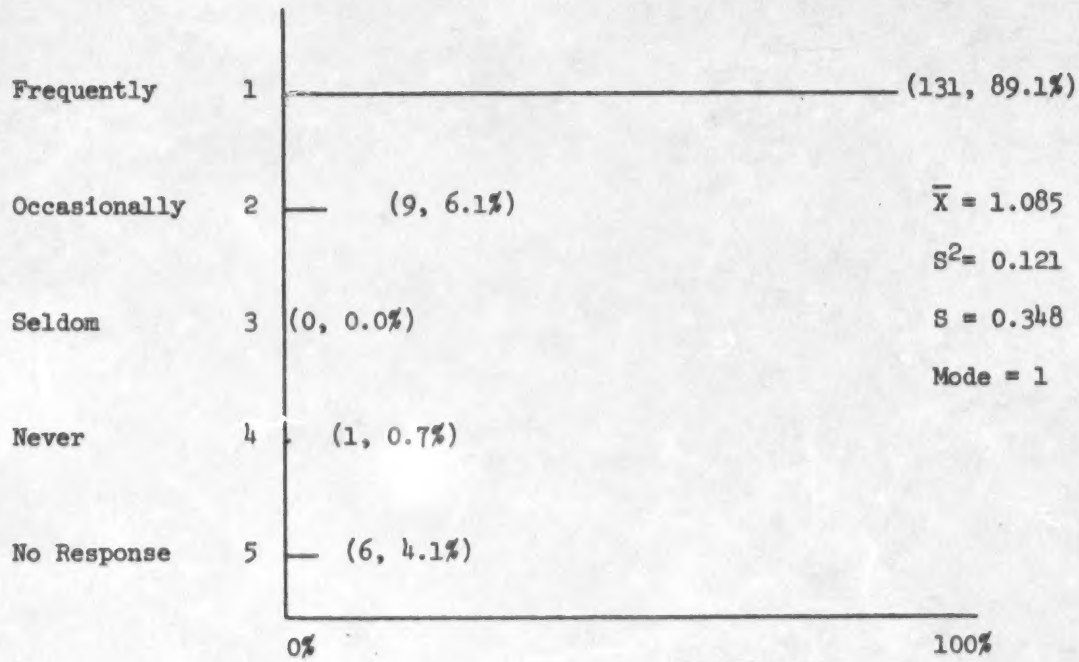


Exhibit J cont.

Item 12:

Made an attempt to become familiar with many aspects of the school program by visiting other classes, talking with other teachers and staff, exploring the library and other school services.

N = 123, Missing data = 24

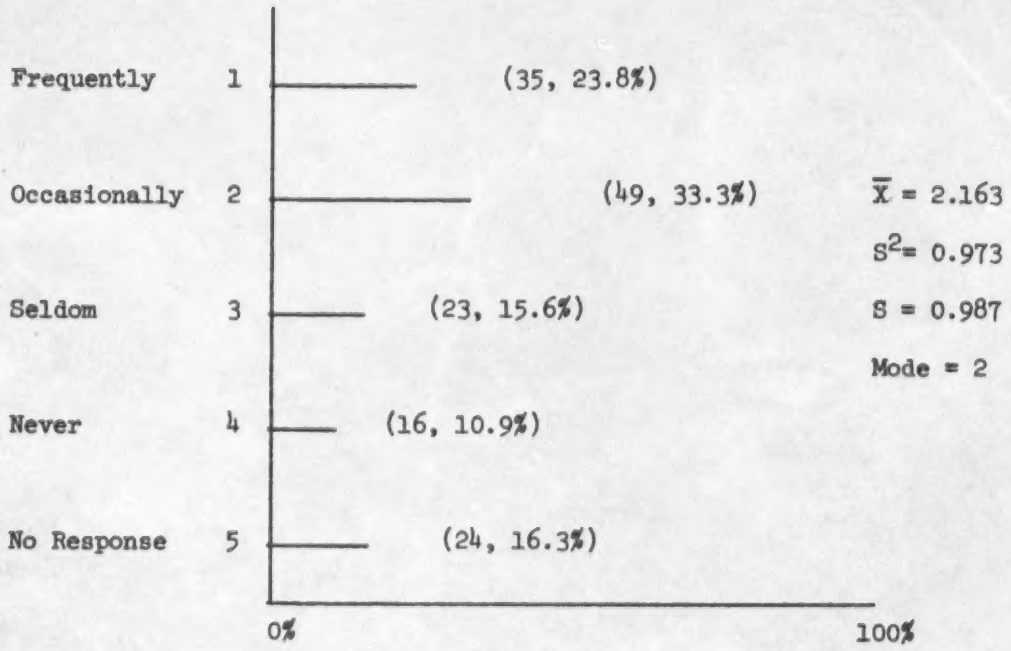


Exhibit J cont.

Item 6:

Was a careful observer of student behavior.

N = 139, Missing data = 8

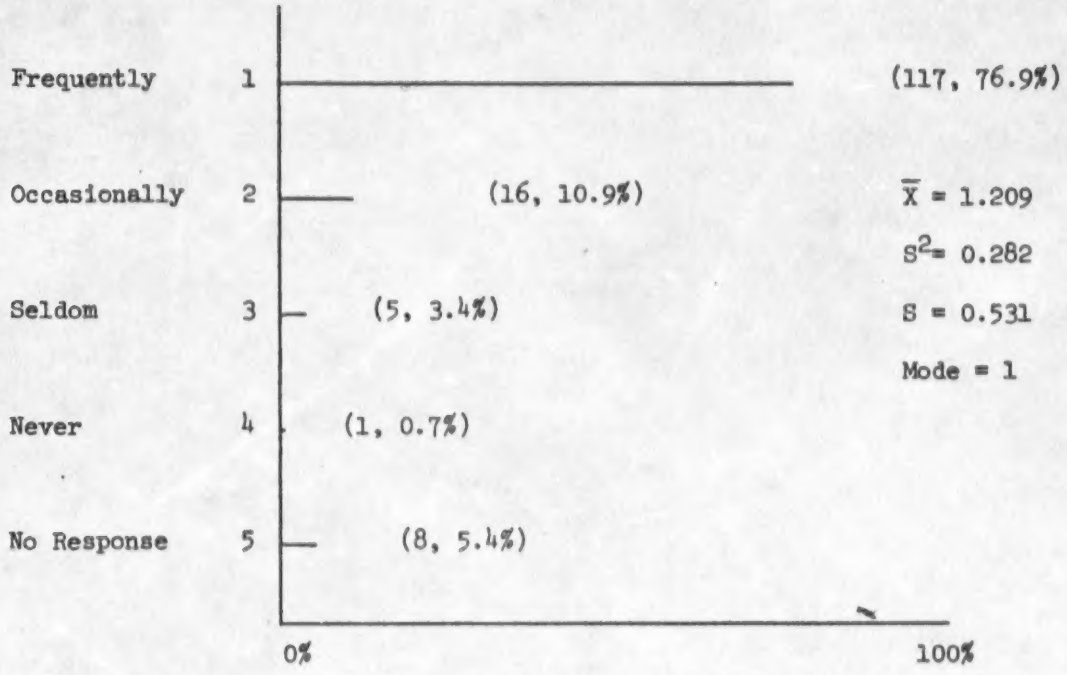
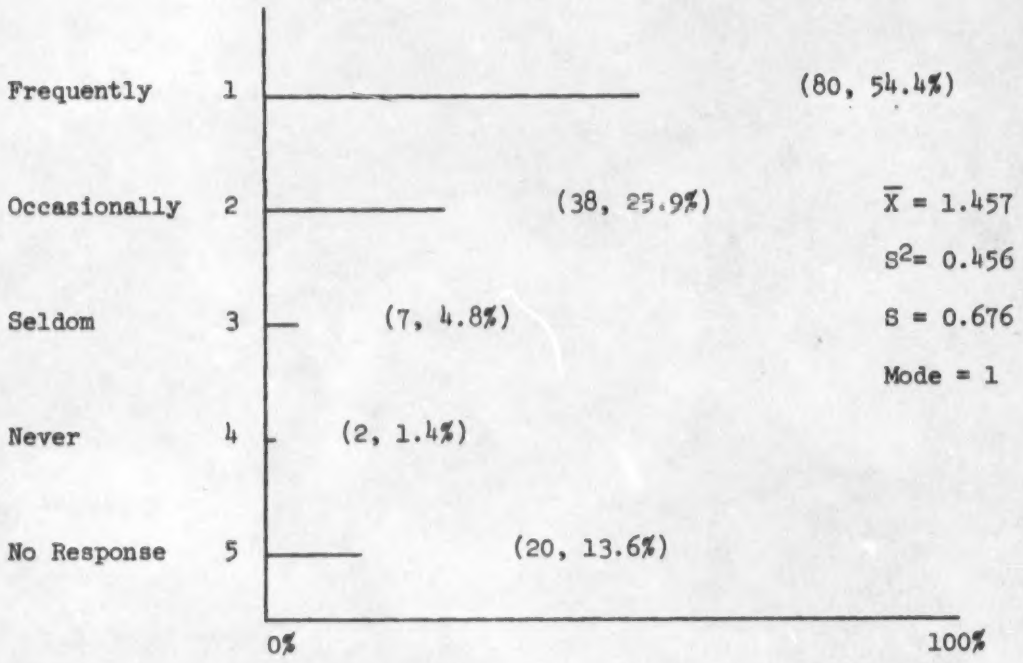


Exhibit J cont.

Item 14:

In dealing with you and your students, gave evidence of basic knowledge of child development, learning theory, teaching methods, age level characteristics and educational philosophy.

N = 127, Missing data = 20



Handout 10

CONCLUSION

The analysis of this case study problem and the particular procedures employed to overcome the problems are offered only as one set of possible analyses and solutions which could be developed and applied. The analysis and solutions described here are authentic as was the problem.

The entire procedure is intended simply as a further illustration of how the general principles outlined in the first portion of this training package can be applied to teacher education program development. The general principles involve 1) developing broad goals and rationales which, 2) can then be translated into intermediate role descriptions, procedures and expectations which, 3) can in turn be translated into observable and operational performance indices which, 4) allow effective program development, planning, evaluation and decision making.

The general principles which are outlined in both the first and second portion of this training package are widely applicable to the development, management and evaluation of programs concerned with providing human social services, training and education. There is a great deal of theoretic and empirical research to support the generalizations stated in this training package, although these relevant information sources have not been cited in this version. Rather an attempt has been made to state principles in a straight-forward common sense manner. It is hoped the training package will provide individuals and groups with organizations of ideas and principles which will help them in related program development and evaluation functions.